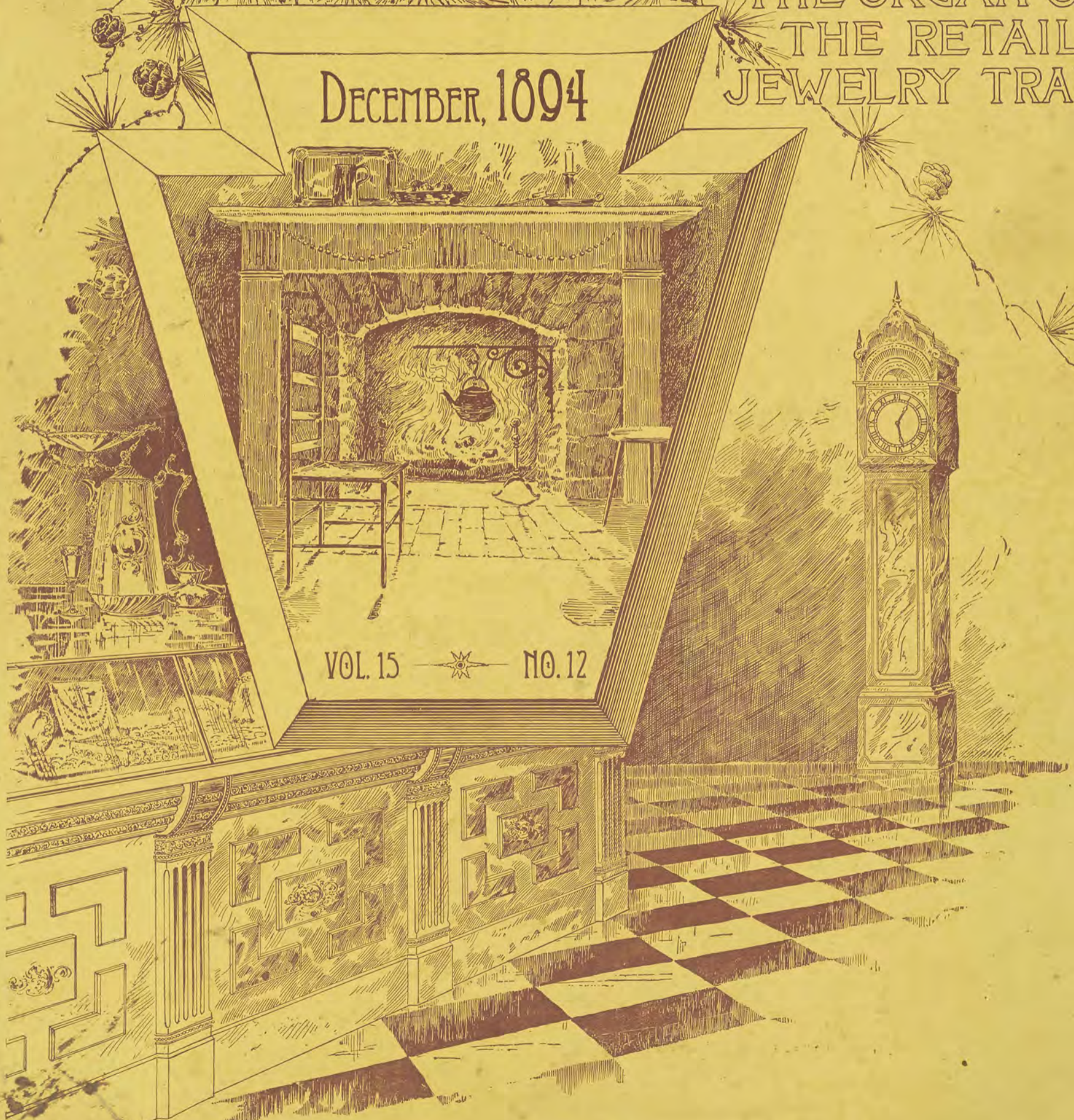


THE KEYSTONE

THE ORGAN OF
THE RETAIL
JEWELRY TRADE

DECEMBER, 1894

VOL. 15 — * — NO. 12



DIAMOND BROOCHES



10437
All Diamonds
\$192.00



10611
All Diamonds
\$248.00



5673
Diamond Sun
\$92.00

*Diamond
Brooches*



10613
Diamond Sun
\$330.00



10556
Diamond Star
\$210.00



9890
All Diamonds
\$188.00

*Diamond
Brooches*



10315
Diamond Sun
\$152.00



10620
Six Diamonds
\$267.50



115
All Diamonds
\$235.00

We have lately added some very pretty patterns of Diamond Brooches to our stock, some of which are shown above. When you have a prospective customer for any of these goods which you do not have in stock, we should be glad to send you some on approval. The prices quoted are subject to a discount to the trade.

J. T. SCOTT & CO.

WATCHES, DIAMONDS AND JEWELRY

4 MAIDEN LANE

NEW YORK

Acid Bottles
Anti-Oxidizer, "Alpha"
 Anvils
 Alcohol Cups
 Arbors, Cork
 Arbors, Turning
 Batteries and Plating Outfits
 Barrel Contractors
 Belting
 Belt Hooks
 Bell-Metal Slips
 Bench Knives
 Bezel Tools
 Benches, Watchmakers' Plain
 Benches, Watchmakers' Roll-Top
 Bench Plates with Cabinet
 Burners, Bunsen
 Blowpipes
Burners, Bunsen, "Perfection"
Burners, Bunsen, Watchmakers'
 Broaches
 Broach Boxes
 Boiling Cups
 Borax
 Borax Holders
 Borax Slate
 Boraxine
 Bow Tighteners
 Brushes, Watchmakers' Hand
 Brushes, Bristle, for Lathe
 Buffs, Emery, all shapes
 Buffs, Felt, all shapes
 Buffs, Leather, all shapes
 Brushes, Dial Dusting
 Brushes, Wire Scratch
 Brushes, Glass Scratch
 Brushes, for Borax
 Brushes, for Satin Finishing
 Burnishers, Steel
 Burnishers, Blood Stone
 Burnishers, Agate
 Cabinets for Watch Glasses
 Cabinets for Tools and Material
 Cabinets for Watch Repairs
 Cabinets for Watch Keys
 Cabinets for Jewels
 Cabinets for Mainsprings
 Cabinets for Watch Material
 Cabinets for Jewelry Repair Jobs
Calipers, the "E.F.B. & Co." Solid Nickel
 Calipers, Pinion (Inside)
 Calipers, Pinion (Outside)
 Case Spring Tools
 Case Openers
 Case Swages
 Case Tools, "Hopkins"
 Case Stakes
 Cement, "Hold-Fast"
 Cement, Transparent
 Cement for Lathes
 Cement for Engravers
 Centering Tools
 Centering Lathes
 Chalk Bottles
 Chalk for Watchmakers' Use
 Chasing Tools
Chucks, the "Mascot" Pivot-Drill
 Chucks for Rivett Lathe
 Chucks for Moseley Lathe
 Chucks for Hopkins
 Chucks for Whitcomb
 Chucks for Webster-Whitcomb
 Chucks for Geneva Lathe
 Chucks for Imitation Moseley
 Chucks for Imitation Whitcomb
 Chucks for Holding Crowns
 Chucks for Holding Bezels
Chucks, The "Facility" Jewel Chucks
 Countershafts
 Countersinks
 Chuck Blocks
Clamps, "Magic Repair"
Clamps, "Magic Repair" Improved
 Corundum Wheels
 Carborundum Wheels
 Crown Cutting Tools
 Crocus, Powdered
 Crocus, Composition
 Dapping Dies and Blocks
 Dapping Die Punches
 Deepening Tools
Dial-Foot Tool, "The Lancaster"
 Demagnetizers
 Draw Benches
 Dividers
 Draw Plates
 Diamantine
Drills, "The Mascot"
Drill Holders, "The Mascot"
 Drill Stocks
 Drill Bows
 Drill Lathes
 Drills, Automatic Twist
 Drills, Morse Twist
 Engraving Machines, Bock's
 Engraving Machines, Francis'
Engraving Blocks, "Double Base"
 Engravers' Eye-Glasses
 Eye-Glass Stands
Eclipse Graver, Drill and Tool Sharpener
 Ear Piercers
 Emery Wheels
 Emery Cloth and Paper
 Emery Files
 Emery Countersinks
 Eye-Glasses for Watchmakers
 Enamel for Repairing Dials
 Face Plates
 Files, "Grobet"
 Files, "Nicholson"
 Filing Blocks
 Files, Ruby
 Forges
 Furnaces for Melting Gold and Silver
 Gauges, Degree
 Gauges, Ring
 Gauges, Centimeter and Ligne
 Gauges, Cylinder
 Gauges, Dial
 Gauges, Watch Glass
 Gauges, Micrometer Caliper
 Gauges, Hairspring
 Gauges, Vernier or Millimeter

Gauges, Jewel Pin
 Gauges, Pivot
 Gauges, Jewel
 Gauges, Mainspring
 Gauges, Key
 Gauges, Wheel
 Gauges, Stub's Wire
 Gauges, Crown
Gold Paint, "Keystone"
Gold-Plating Solution, "Alpha"
 Gold Test Stones
 Gold Test Needles
Gravers, "E. F. B. & Co. Reversible"
Gravers, "E. F. B. & Co. Adjustable"
Gravers, "E. F. B. & Co. Adj. Lining"
 Hand Removers, Watch
Hand Removers, Clock, "E. F. B. & Co."
 Hairspring Collet Removers
 Hairspring Collet Wrenches

Lamps, Alcohol
 Lamps, Student
 Lathes, Rivett
 Lathes, Moseley
 Lathes, Hopkins
 Lathes, Whitcomb
 Lathes, Webster-Whitcomb
 Lathes, Geneva
 Lathes, Barnes
 Lathes, Rivett Bench
 Lathes, Stark Bench
 Lathes, Polishing
 Lathes, Attachments of All Kinds
 Lathes, Van Norman
 Lathes, Jacot Pivot
 Lathes, Jeweling
 Lathes, Verge
 Lathe Head, Polishing
 Letters and Figures, Steel

Oiler, "The Perfection Fountain"
 Oil, Nye's
 Oil, Kelley's
 Oil, Cuyper's
 Oil, Chronometer
 Oil for Stem-Wind Parts of Watch
 Oil for Lathe and Oil-Stones
 Oil, Diamond
 Oil Cups
 Oil Cans
 Oil-Stones
 Oil-Stone Powder, Arkansas
 Pegwood
 Pin Wood
 Pegwood Sharpeners
 Pin Pushers
 Pin Vises
 Pliers, Stub's
 Pliers, Best Quality Imported
 Pliers, Swedish
 Pliers, Hall's
 Punches, Card
 Punches, Mainspring
 Punches, Closing Hole
 Poising Tools
 Polishing Blocks
 Polishing Material
 Rolls, Jewelers'
 Ring Jointers
 Roller Removers
 Saw Frames
 Saws
 Screw Stands
 Screw Extractors
 Scales
 Scales, Diamond
 Scrapers
Screw-Driver, "Elite"
 Screw Driver, Clock
 Screw-Head Tools
 Screw Plates
 Show Cases
 Soldering Blocks
 Soldering Pads
Solder, "H. A." Bismuth
 Staking-Tools, Rivett
 Staking-Tools, Hall's
 Staking-Tools, C. W. T. & Co.
 Staking-Tools, "Columbian"
 Staking-Tools, Boley
 Tongs, Crucible
 Tongs, Round Nose
 Tongs, Broad Nose
 Tongs, Hand
 Tongs, Draw
 Thermometers
 Tweezers, all kinds
 Uprighting Tools
 Vises, Pin
 Vises, Bench
 Vises, Hand
 Wheels, "The Mascot"
 Wheel Protectors
 Wheels, Foot
 Wire, Stub's Steel
 Wire, Brass
 Wire, German Silver
 Wire, Binding
 Watch Checks
 Wrenches
Watch Signs, the "Mammoth"
Watch Glasses, "E. F. B. & Co."

and a thousand other things, are only part of the items which constitute our present stock. It is overflowing in its abundance and complete in its variety of anything and everything which a Jeweler may need in our line. The **Odd, Hard-to-Get,** and usually **"We Don't Have,"** things are what we would especially like you to try us on and compare our service with others. Over \$92,000.00 worth of tools, materials and supplies alone (exclusive of book accounts), thirty-five well-trained people, the advantages of forty out-going mails (about as many in-coming), and thirty-three trains carrying express matter daily, are at your service.

Accuracy, Correctness of Price and Promptness are leading features with us. We would appreciate a trial if you are not now one of our customers, to which we promise in advance our very best attention.

Ezra F. Bowman & Co.
Lancaster, Pa.

Hand Remover, Watch, "The Simplicity"
 Hammers
 Handles, Hammer
 Handles, File
Handles, Graver, "E. F. B. & Co." Reversible
Handles, Graver, "E. F. B. & Co." Adjustable
 Ingots
 Insulators, Watch
Jewels, All Kinds "Junod"
 Jeweling Tools
 Jewel Pin Setters
 Jewel Bezel Openers
 Jewel Bezel Closers
Jewel Pushers, "E. F. B. & Co."
 Keys, Clock
 Keys, Watch
 Keys, Bench
 Keys, Pendant Set
 Key Rings

Mainsprings, "E. F. B. & Co. Guaranteed"
 Magnets
 Mallets, Rawhide
 Mallets, Boxwood
 Mallets, Ebony
 Mandrels, Ring
 Mandrels, Thimble
 Matching Tools, Escapement, "Boynton"
 Material Bottles
 Material Trays
 Material Boxes
 Mortars, Agate, and Pestle
 Mainspring Winders, Watch
 Mainspring Winders, Clock
 Milling Tools
 Movement Adjusters
 Movement Covers
 Movement Rests
Movement Holder, "E. F. B. & Co."

Material for following Watches

Agassiz Watch Co.
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 Aurora Watch Co.
 Cheshire Watch Co.
 Columbus Watch Co.
 Continental Watch Co.
 Elgin Watch Co.
 Fredonia Watch Co.
 Hampden Watch Co.
 Hamilton Watch Co.
 Howard Watch Co.
 Illinois Watch Co.
 Keystone Watch Co.
 Lancaster Watch Co.
 New York Standard Watch Co.
 Manhattan Watch Co.
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 Peoria Watch Co.
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 Seth Thomas Watch Co.
 Timing and Repeating Watch Co.
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 U. S. Waltham Watch Co.
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 Gem Chatelaine Watch Material
 Mignon Chatelaine Watch Material
 Bijou Chatelaine Watch Material
 Imitation American Watch Material
 Longine's Material
 Longine's Chronograph Material
 Nassau Chronograph Material
 Nassau Watch Material
 American Clock Material
 French Clock and Music Box Material
 Roskopf Watch Material
 Victor Watch Material
 Duplex Watch Material
 Swiss Watch Material

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 Jewelers' Findings
 Cotton
 Cards
 Envelopes
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 Tags
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 Silk Guards
 White Metal Chains
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906

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FRENCH ENAMELS



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Special attention given to matching delicate colors, such as Navy Blue, Violet,
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PRINCETON ORANGE

We carry a large stock of

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Liquid Enamels in one-ounce bottles
Enamel Plates—Emery and Corundum Files
Enamel Furnaces for Gas and Coal
Muffles, All Sizes—Agate Mortars and Pestles

SEND FOR PRICE-LIST

Whatever is beautiful, or worthy, or in any way desirable in manufacturer's products, is here in generous provision; whatever is exceptional in value for the price, or remarkable in price for the value, in Watches, Chains and Spectacles, is to be found in our stock; whatever appeals to the appreciation of legitimate jewelers, in the way of proper practices and straightforward methods, has place in our policy of business. We are prepared this Christmas season as never before to meet the exact requirements and quick demands of the Trade. Our service is at its best, our stock at its fullest, our prices at the most inviting point. We wait your commands . . .

The Non-Retailing Company, Lancaster, Pa.

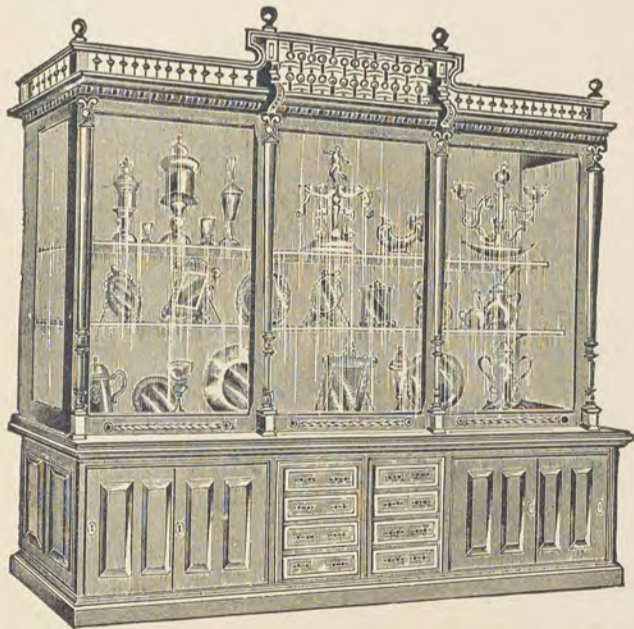
Right Goods
sold at
Right Prices
in
Right Ways

American Show Case and Mirror Works

L. G. HANSEN, Proprietor.

27 Lake Street, Chicago

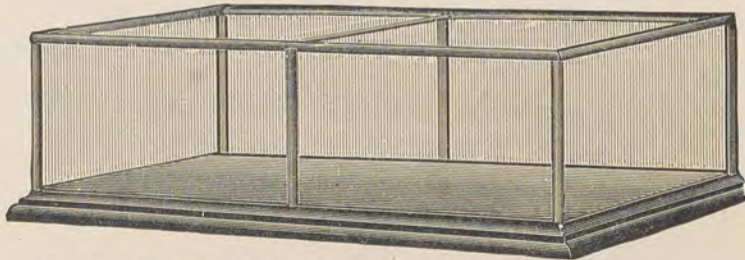
Branch—Seattle, Wash.



No. 101. This is the most beautiful Jeweler's Wall Show-Case made for the price. In Walnut, Oak or Cherry. In stock and made to order.

Our Cases are the finest made
and always carried in stock

No. 1.



Our Flat Top, Double-Thick English Glass, all Walnut, Oak or Cherry Ten-Foot Show-Case, 17 inches high and 28 inches wide, for **\$17.00**
Either spring hinge doors or sliding doors. Doors in all cases have full mirrors.
The best extra heavy, double-thick glass used.
Cases boxed and delivered on board of cars at Chicago.

We make a specialty of Store Furniture of Best Workmanship for the Jewelry, Silverware and Kindred Trades

at reasonable figures. Complete Outfits made on shortest notice. Original Designs furnished upon application.

SEND FOR OUR NEW CATALOGUE FOR 1893-4.

MENTION THE KEYSTONE.

CALL AND SEE US WHEN IN CHICAGO.



DETACHED.

The Matinee "Wristlet"

PATENT APPLIED FOR.



ATTACHED.

The illustrations here shown thoroughly illustrate the utility of this new and much-needed device. There is no better protection for an Opera-Glass than to carry it in its leather case. The Matinee Wristlet enables easy portability, leaving the hands free and unencumbered. It can be instantly attached or detached by any one. Ask your jobber for them. Price, \$4.00 per dozen and upwards. Manufactured by

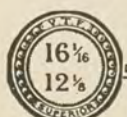
Hammel, Riglander & Co.
New York.



The Improved Universal Engraving Block, No. 2.

Price, complete with Leather Pad, Japanned, each, \$6.00
 " " " " " Nickel-Plated, each, 9.00

The most complete and compact Block in the market. No extra Stumps, Plugs, or other attachments required. All the many good features of the best blocks are embodied in this tool. It will hold every article that comes in an engraver's line and can be manipulated with the greatest ease. The four prongs are closed simultaneously, by means of the large Chuck Screw, while the four Side Screws are only used to clamp work of irregular shape, such as Spoons, etc. As shown in illustrations, the Ring and Thimble Holders are pivotally attached to the uprights and are quickly brought to position when required. This Block can be used as flat or ball-base by reversing simply the base. This Block is the result of many years experience and is "UNIVERSAL" in the true sense of the word. For sale by all Jobbers. Manufactured by



Don't forget our "V. T. F." Beaded Label Watch Glasses. They are the BEST IN THE WORLD! The sale of these glasses represents more than half the product of all the watch glasses made.

HAMMEL, RIGLANDER & Co.
NEW YORK.

A Definition.

SUCCESS (A word which is not heard frequently in this year of grace, outside of the 13,962 jewelers who handle New York Standard Watches) —In merchandising, the measure of the value of brains and a quick wit.

A Definition.

POPULARITY—That which a merchant deserves from the public by reason of his forethought in anticipating the public's demand. (There is a moral between the lines for jewelers who have not yet put in a stock of New York Standard Watches).

1894—A Retrospect.

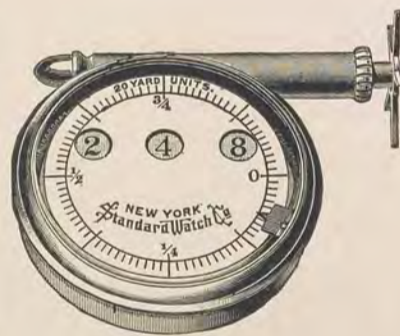
The year which is drawing to a close has witnessed a remarkable progress in horological art, as exemplified in the achievements of the New York Standard Watch Company. Whatever the future may hold in store, in the way of valuable innovations on the present standards of products, "the past, at least, is secure" to the makers of The Best Watch in the World for the Money; and every American must feel an honest pride in the fact that American ingenuity and energy have finally triumphed in securing the market for low-priced Watches of superior quality to a young and aggressive American corporation, against the foreign makers who held, through many generations, impregnable title to that right of supply.

If we summarize the notable accomplishments of the year, in the domain of horology, on the basis of high-quality-and-low-price, we find that the New York Standard Watch Company leads all contemporary manufacturers in both hemispheres. This Company, within the current year, has added Patent Regulators and Fancy Dials to 11-jeweled 18 size movements without extra charge; furnished the *interchangeable* feature on all 16 size movements, whereby a Hunting movement could be changed to Open-Face, or the reverse, on a minute's notice; sent out Movement Holders with its 11-jeweled 16 size without extra cost to the trade; issued a 7-jeweled movement in 18 size which is the despair of Switzerland, in contemplation of its excellent quality at its phenomenal price; and finally presented a line of Complete Nickel-Cased Watches, in 18, 16 and 6 size, which are the marvel of the day in all circles of watch production. And now, "like Cæsar, sighing for new worlds to conquer," the New York Standard Watch Company invades another field in order to furnish another source of profit to the Jewelry Trade. The enormous increase of bicycle riding provides the occasion; the "Standard" Cyclometer, or distance measurer, provides the means for additional income to the Jeweler. In the waning year this Watch Company announces an addition to its regular products, in the *best* Cyclometer ever made, at a lower price than ever put on the inefficient devices heretofore in use. It will be discussed on this page hereafter—at present, only this memorandum for the wide-awake:

The "Standard" Cyclometer



Made with all the accuracy and precision of a watch. Registers 1000 miles and repeats. Noiseless in action; dust and water-proof; easily applied; adjustable to read from any position; has white ivory enamel dial, same as a watch; made for 26, 28 and 30-inch wheels, but can be adapted to any



size wheel by changing a single part, at a cost of 25 cents; absolutely warranted—if broken in an accident to the wheel we will repair without charge, on receipt of postage to cover return. Price, only \$2.00. (Discount to the trade.) The trade supplied by Jobbers in watches.

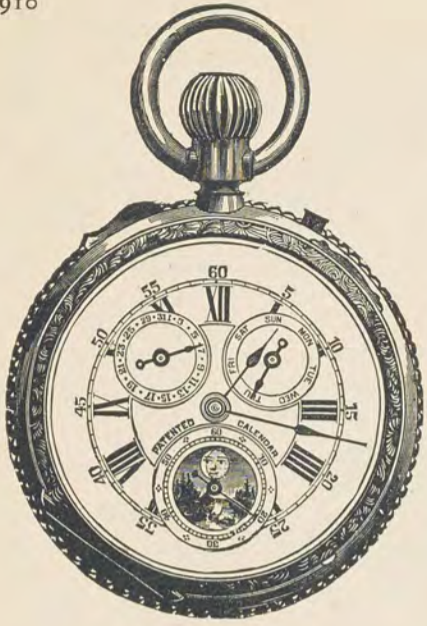
The New York Standard Watch Co.

A Definition.

HARD TIMES—The attempt to sell low-priced watches (quality questionable) in December, 1894, against New York Standard Movements, the quality of which is fixed by the universal verdict, "The Best Watch in the World for the Money."

A Definition.

GOOD TIMES—The result of a determination to put in stock and advertise and push the easy sale of the *good timers* which bear on their honest faces the imprint, "New York Standard Watch Co."

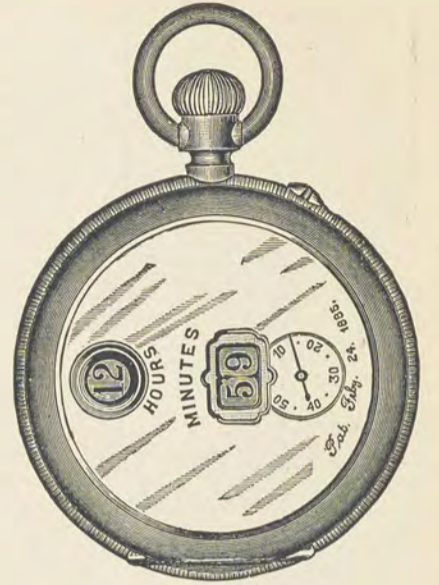


Automatic Watches

in

Gold, Silver and Nickel Cases
Hunting and Open-Faced

At Half the Cost of Importation



All the

Leading Makes of American Movements and Cases

HEADQUARTERS FOR

Waltham Watches

Diamonds Watches Silverware Optical Goods

Tools and Materials

and

Everything Else Needed by Jewelers

All the

Latest Jewelry Novelties in Gold, Silver and Plated Goods

DAVID F. CONOVER

B. FRANK WILLIAMS

David F. Conover & Co.

Chestnut and Seventh Sts.

PHILADELPHIA

Headquarters

for
RICH CUT GLASS

"CROWN
PAIRPOINT"
CHINA

and
FINE DECORATED
ART WARES

Pairpoint

Manufacturing Company

MAKERS OF HIGHEST GRADE

Gold and Silver Plate

Factories, NEW BEDFORD, MASS.

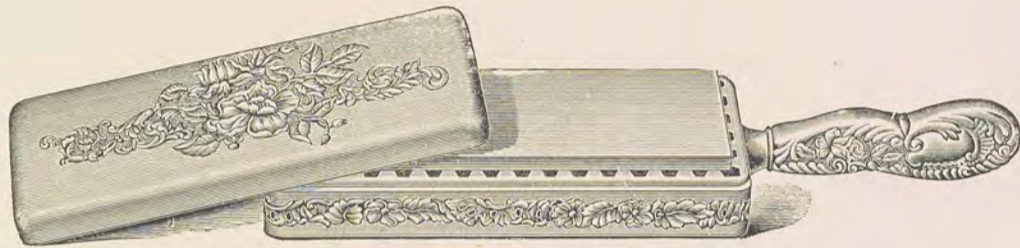
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No. 2835 1/2. Razor Hone. Embossed cover.

TRADE  MARK
FOR
FRENCH CHINA

TRADE  MARK
FOR
CUT GLASS



No. 2016/42. Rich, Decorated China Vase.
Crown Pairpoint.



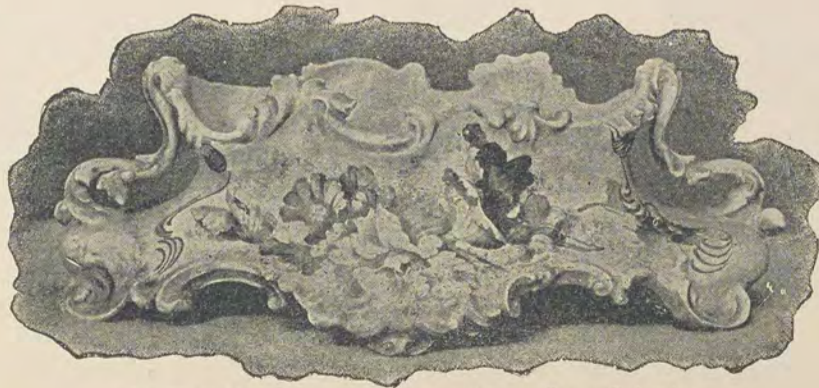
No. 334. Coffee Urn. Raised, chased.



No. 1030. 6-in. Vase.
Westminster.



No. 1250. Cream. Bedford.



No. 2017/14. Jardiniere or Center Piece. Crown Pairpoint.



No. 1400. Finger Bowl.
Straw-dia-fan.

CATALOGUE No. 10

contains
our latest productions and
a complete line of

Silver-Plated Ware

PAIRPOINT
FLAT 1880 WARE
BEST

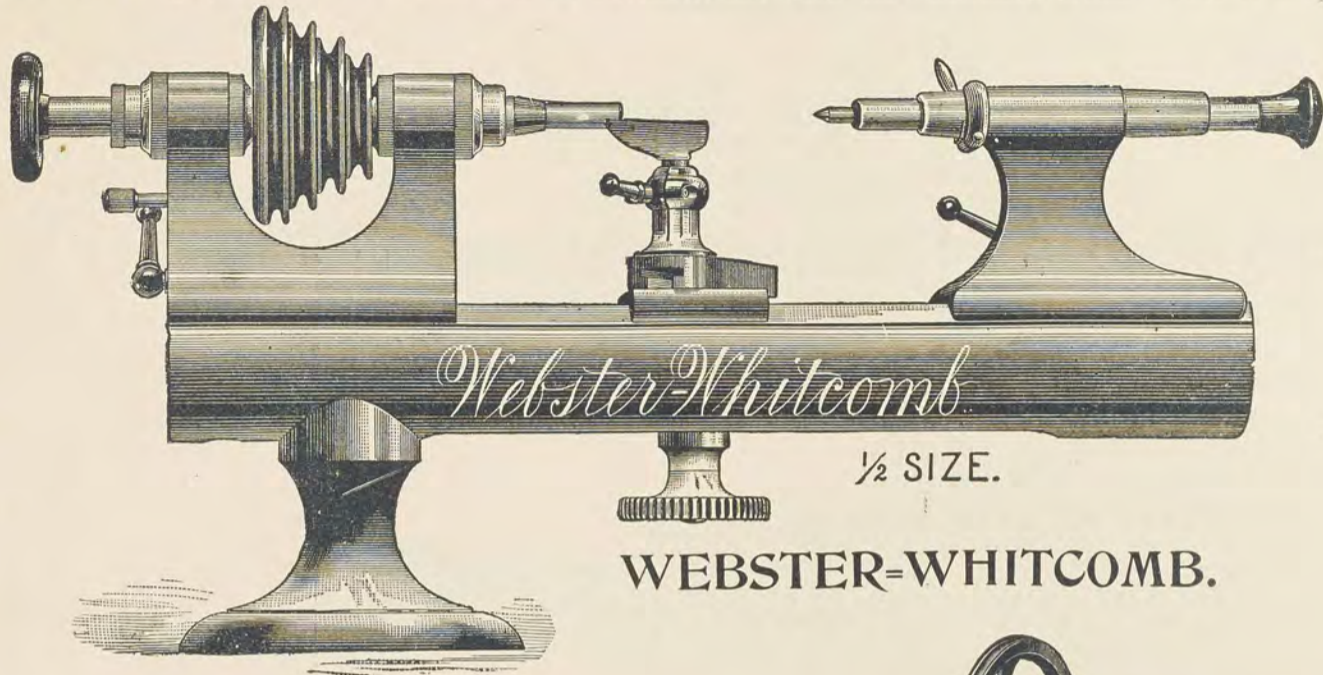
CATALOGUE No. 11

contains
an extensive collection
of

Rich Cut Glass

LATHES LOWER THAN EVER!

We are making special efforts on Lathe sales for November, and quote some interesting prices. Write to us for special circulars and discounts.



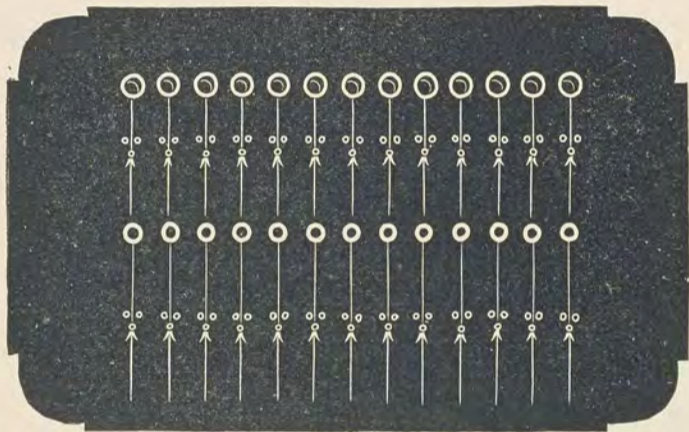
WEBSTER-WHITCOMB.

WE SELL
Whitcomb, Moseley and
Rivett Lathes.

Prices of Webster-Whitcomb Lathes are:

10-chuck combination,	\$46.00.
15 " " "	51.00.
20 " " "	55.50.
30 " " "	65.00.
40 " " "	74.00.

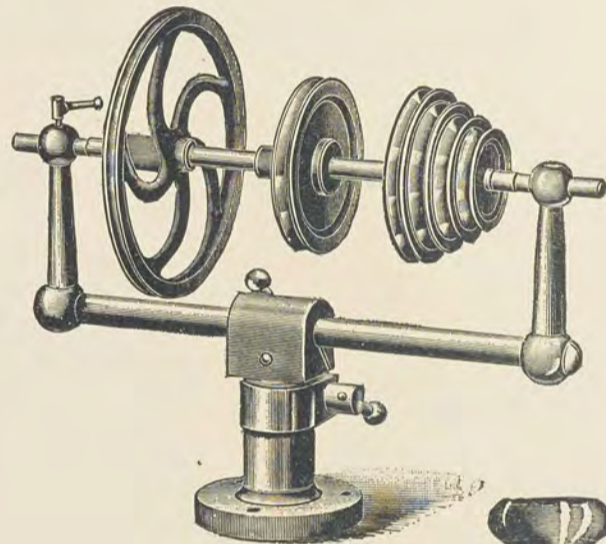
SPECIAL CASH DISCOUNT FROM
THESE PRICES.



14 K. DIAMOND-SET HANDS.
Quality warranted.

Sizes and Prices.	Per doz. pairs.
18 size Waltham or Elgin,	\$7.50.
16 " " " "	7.50.
6 " " " "	6.00.
0 " " " "	6.00.
14 K. Seconds to match,	per doz., 2.00.

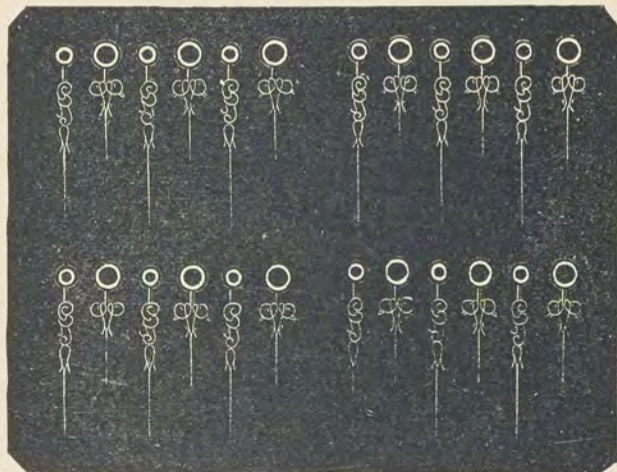
Less 6 per cent. for cash.



Full
Nickel-Plated
Countershaft.

No. 9.

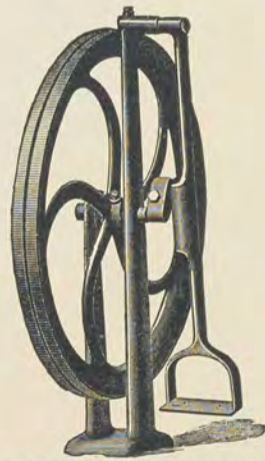
Price, \$3.75, net cash.



14 K. GOTHIC HANDS. Warranted not to tarnish.

Sizes and Prices.	Per doz. pairs.
18 size Waltham and Elgin,	\$7.50.
16 " " " "	7.50.
6 " " " "	6.50.
0 " " " "	6.00.
14 K. Seconds to match,	per doz., 2.00.

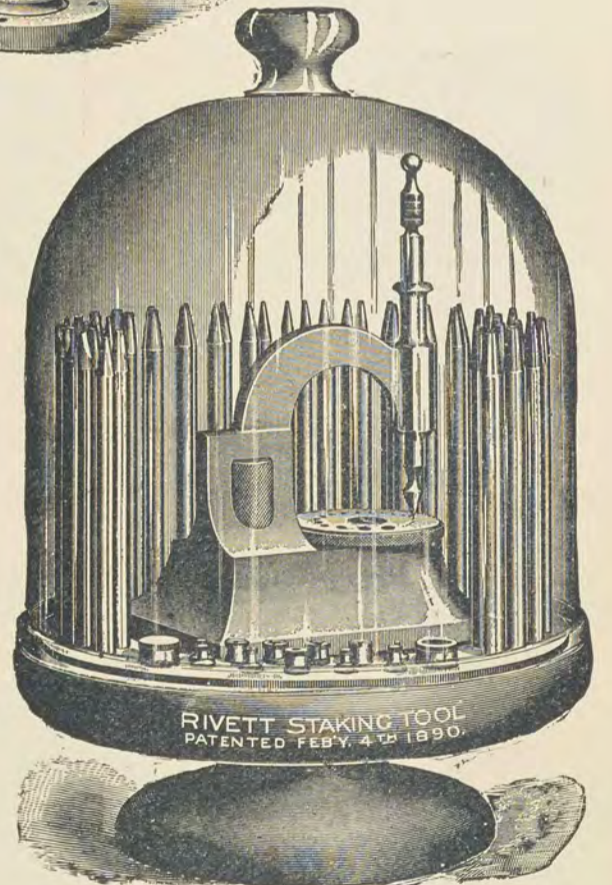
Less 6 per cent. for cash.



SWING FOOT-WHEELS.

30 lb. Genuine Webster-Whitcomb,	\$8.50.
40 lb. " " "	10.00.
40 lb. Imitation,	5.50.

Less 6 per cent. for cash.



STAKING TOOLS.

	Prices.
Genuine Rivett,	\$13.00.
" Hall,	12.50.
Boley, 50 punch, with globe,	6.75.
" 32 " " "	5.50.
Imported, 24 " " "	2.75.

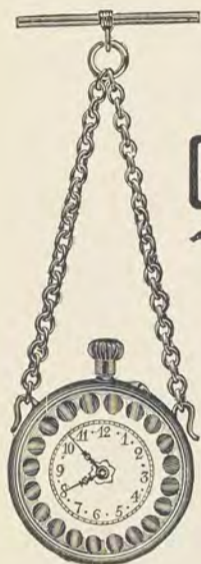
Jewelers in want of a lathe, moderate in price and at the same time serviceable, should write for our circular giving description and prices of our "Gem" and "Geneva" Lathes and Chucks.

Send us your material orders. During the busy months we do not "side-track" them, but fill them AT ONCE and CORRECT.

E. & J. SWIGART, No. 101 W. Fifth St., Cincinnati, Ohio.

BYRON L. STRASBURGER & Co.

31 Maiden Lane, New York



are offering

Crystal Ball Watches

in SILVER,
10 KARAT GOLD and
14 KARAT
GOLD TRIMMED CASES

at

Exceptionally Low Prices

HARDINGE BROTHERS

1036 Lincoln Ave., Chicago, Ill.



We call special attention to our new Roller Chuck, which takes Balance with Roller on. It has double hole in face to admit Ruby Pin with the greatest safety, and is nice and close to center hole.

If you want numbers 5½, 6, 6½, 7, you cannot make a better purchase than one of these chucks at \$1.25 each.

It will be good policy for any one who wants GOOD chucks to try the DALE. We have not had six chucks returned for not being HARD and TRUE in the last year.

We have replaced every one free that is broken, whether it is our fault or not. We know a good chuck cannot be broken easily. Flat or oval face, 95c. each.

Write for New Circular and Catalogue.

Successors to HOROLOGICAL TOOL CO.

I stand at the head

in the manufacture of

Staking Tools



913

All Jobbers in first-class goods, also Horological Schools, testify to the same. Please note the following:

Mr. F. L. HERRICK, Esq., Roxbury, Vt.
Dear Sir: We have sold more than one-half gross of the Hall Staking Tools within the past two years. We consider that sufficient evidence of our opinion of its merits. When we find its superior we shall certainly adopt it.
HUTCHINSON'S PRACTICAL SCHOOL
FOR WATCHMAKERS.
J. L. Hutchinson, Supt.

Not only in Staking Tools do we take the lead, but in Watchmakers' Screw-Drivers and other fine lines of goods.

Do not be led astray by importers and jobbers saying that they have as good tools as the J. G. Hall's, as other manufacturers do not make them. They are all stamped "The J. G. Hall Mfg. Co."

Wishing you all a happy and prosperous New Year, I am
Yours with the trade for the best,

F. L. HERRICK,
Roxbury, Vt.

Our Prices for Gold and Silver Plating are very reasonable and will be made known on application.



On Watch Cases, Gentlemen's Chains and other articles subject to much wear, we put on so much gold for so much money.



On Fine Jewelry, where the object is to get a beautiful effect, the price depends on the amount of work required to get the article into condition.



Skillful Workmen and the Best of Facilities enable us to do this work promptly and in the best manner.

GOLD AND SILVER SOLUTIONS
AT LOWEST PRICES.

E. W. Taylor, Electroplater and Gilder
Waterbury, Conn.

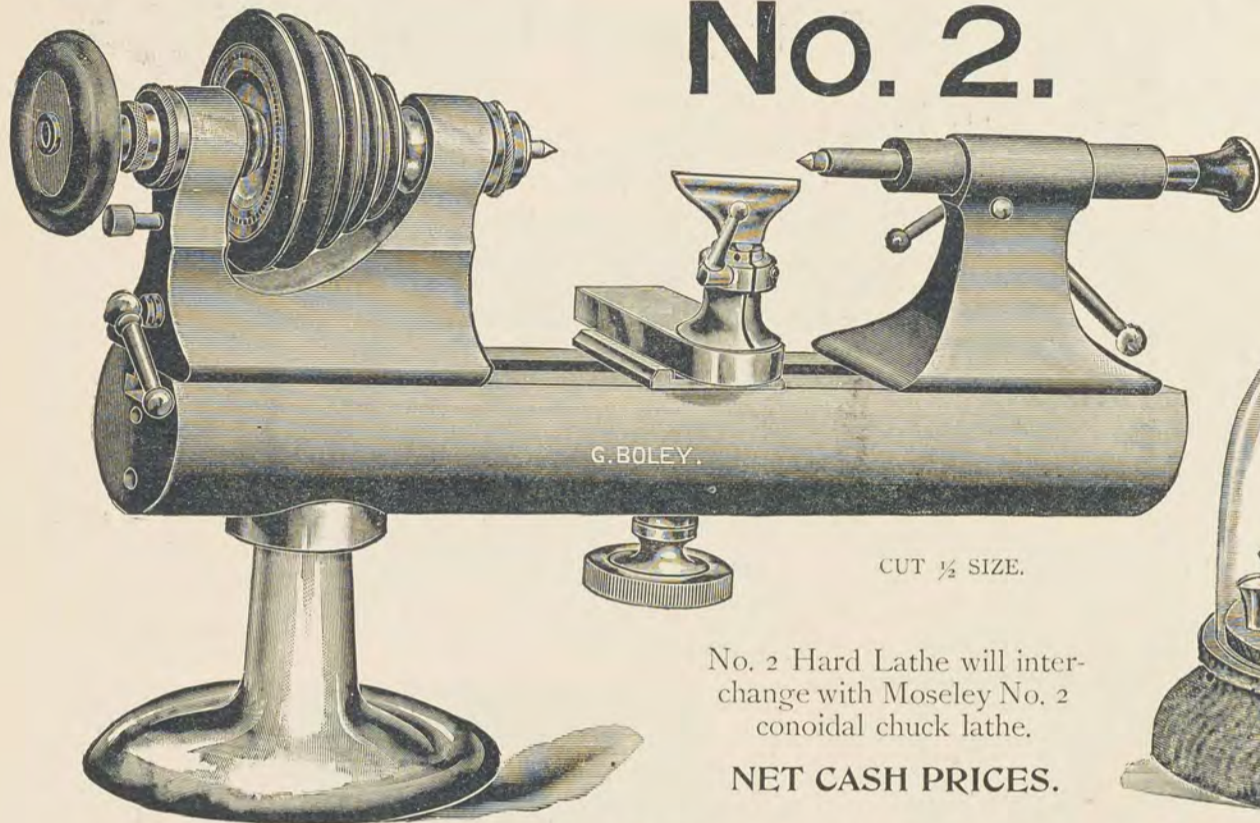
SWARTCHILD & CO. Exclusive Watchmakers', Jewelers' and Engravers' Supply House.

Masonic Temple, Chicago, U. S. A.

No. 2.

Always in the Lead!

Send for our 1894 Catalogue if you have not got it yet.

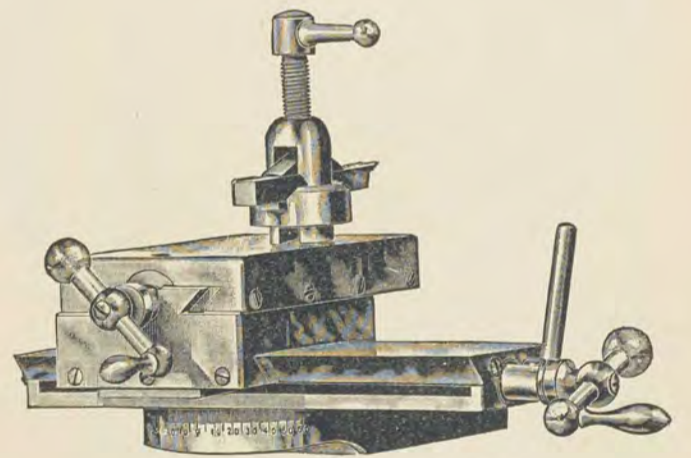
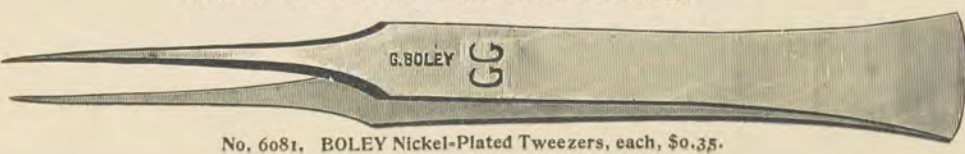
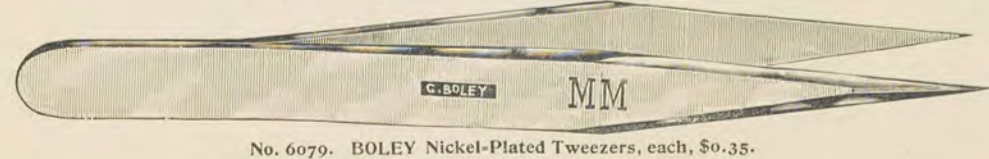
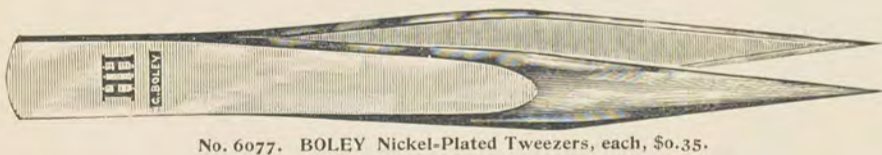
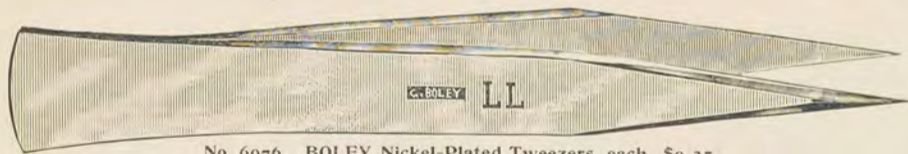


OUR ESSLINGEN LATHE.

The Genuine G. BOLEY Full-Hard American Lathe No. 2. Moseley Size.

- No. 6071. BOLEY Genuine Lathe, ten-chuck combination includes six Wire, two Wheel-Chucks, one Taper-Chuck, one Screw-Chuck, one each 3/4 and 1/2 inch and six 1/4-inch Cement Brasses, two each Brass and Steel Tapers, Chuck-Block with Glass Globe, and Belting, \$27.25
 - No. 6072. BOLEY Genuine Lathe, fifteen-chuck combination includes ten Wire-Chucks, three Wheel-Chucks, one Taper-Chuck, one Screw-Chuck, one each 3/4 and 1/2-inch and six 1/4-inch Cement Brasses, two each Brass and Steel Tapers, Chuck-Block with Glass Globe, and Belting, 31.50
 - No. 6073. BOLEY Genuine Lathe, twenty-chuck combination includes fifteen Wire-Chucks, three Wheel-Chucks, one Taper-Chuck, one Screw-Chuck, one each 3/4 and 1/2-inch and six 1/4-inch Cement Brasses, two each Brass and Steel Tapers, Chuck-Block with Glass Globe, and Belting, 35.50
- Extra Chucks, each, \$0.85.

To any one in need of a first-class, high grade, hard, well-made and excellent finish lathe, we can cheerfully recommend our No. 2 Esslingen Boley Lathe, and are willing to send one on trial to responsible parties on approval.



SWARTCHILD & Co.

CHICAGO, ILL.

"DIAMOND BRAND"

MAINSPRINGS ARE SUPERIOR TO ALL OTHERS. THEY SELDOM BREAK AND NEVER SET.

We keep a full line for all American and Swiss watches, and the best selected stock of Tools, Materials and Jewelers' Supplies in the United States, at the **LOWEST PRICES.**

Our new 800-page Jewelry Catalogue for 1895 will be issued October 15th. Should you not receive it in due time, advise us.

BENJ. ALLEN & Co.,

141 & 143 State St., Chicago, Ill.

WATCHES, CLOCKS, DIAMONDS AND SILVERWARE.



Patent Fibre-Faced Hammers

MADE IN TWO SIZES.

5 oz. for Watchmakers, Dentists, etc.
10 oz. for Manufacturing Jewelers, Machinists, etc.

Price, each, 60 cents.

Extra faces per dozen pairs, 60 cts.

These hammers take the place of the mallet without being bulky, and will be found very useful to any metal worker, as a hard elastic blow can be given without injury to the work. The fibre faces, held by the screw rings, can be quickly replaced when worn by use.

Sold by all Tool and Material Houses. Manufactured only by

W. W. OLIVER, 1483-1485 NIAGARA ST.
BUFFALO, N. Y.

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Small Fancy Enamel and Diamond-Set Watches

FROM 6 TO 12 LINES.

Selection Packages Sent to Responsible Firms.



Hipp Didisheim & Bro.

Importers,

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Here's an Auctioneer

with { an expert's knowledge of the value of jewelry goods;
fifteen years' experience in auctioneering;
a national reputation for ironclad integrity and professional ability;
a cultivated hold on public confidence;
an unbroken record of successful sales;
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Here's a Chance

for jewelers who believe in raising cash and their reputation at the same time. The use of deceitful methods and goods may pay unscrupulous auctioneers; such an auction cannot but be ruinous to the jeweler.

My Capability

not merely to sell profitably, but to make purchasers at my sales permanent customers of the house is vouched for by all past patrons.

HERMAN G. BRIGGS

Howell, Mich.

Established 1879.

Correspondence Confidential.

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- ROSEMAN & LEVY, New York.
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- BOWLER & BURDICK Co., Cleveland, Ohio.
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- LANGE BROS., Dubuque, Iowa.
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Manufacturers and Importers of

PLAIN AND COMPLICATED WATCHES.

SPLITS

A Specialty.



SOLE AGENTS FOR **JACQUES LECOULTRE RAZORS.**



The Oldest
and Best

Special Classes in Optics

Every branch of the Horological Art, including Engraving and Jewelry Work, taught by experienced and reliable instructors. The School is equipped with the latest and most improved machinery and tools.

We have secured all the Peoria Watch Material, and are now disposing of it to the jobbers.

Write for Catalogue and Particulars.

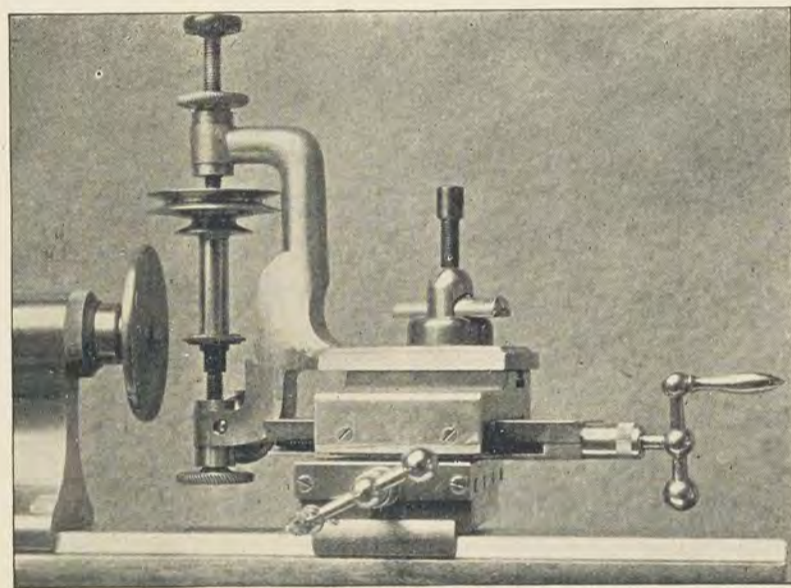
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**Parsons'
Horological Institute**

(SUCCESSORS TO PARSONS, IDE & CO.)

Peoria, Ill.

Do not confound this School with any other in Peoria or elsewhere.



Send to your jobber or direct to us for the **Wheel-Cutter** represented above. **Price, only \$7.00.** Fits almost any American lathe, and can be used for a great many things besides wheel-cutting. It is made in the best of shape, with hardened bearings, and will last a lifetime and not get out of order. You cannot afford to be without one.





A concern standing on a platform which embraces

High character of its productions—Truthfulness of its assertions
Reliability of its service—Positive certainty of its right prices

a concern embodying

Brains—Experience—Capital and Organization

must succeed, and its productions constantly grow in favor.

The eminent position we now hold in the plated ware world has been gained only by intelligent and unremitting work, and by a strict adherence to those principles without which there can be no success.

Having a clear knowledge on all points of manufacturing, a plant equipped with every facility, manufacturing every article on an extensive scale, we have proven, and will continue to prove, the possibilities of selling high class plated ware at comparatively small cost, and we are confident the trade will continue to reward us with that appreciation which insures success.

Thus, by the employment of every known mercantile force, our position has been changed from the commonplace to the extraordinary,



known throughout the length and breadth of the land, is recognized as the mark of merit and reliability.

It is, therefore, but the natural result of our success in the past, that we look forward with particularly bright expectations to the future.

As a means of still further promoting trade relations, we have deemed it essential to have permanent representation in NEW YORK CITY, and we take pleasure in informing our friends, and the trade in general, that in January next we shall establish an agency there, at

Nos. 304 and 306 Fourth Avenue, corner Madison Square.

This agency will be under the direction of Mr. Robert Lefferts, whose high character and solid reputation are widely known; his associate, Mr. Robert W. White, Jr., scarcely needs an introduction—his familiarity with plated ware, and ability as a salesman, being well known by all the trade.

It is further purposed to associate with our agency capable representatives to look after the trade in New York City, Brooklyn and adjacent cities, and likewise to bring our line to the attention of all buyers in the Eastern section, and visiting buyers from any part of the country.

We feel convinced that this step will enable us to cater better than ever to the requirements of our patrons and the trade at large, and will tend to promote our common interests.

Homan & Company, Cincinnati

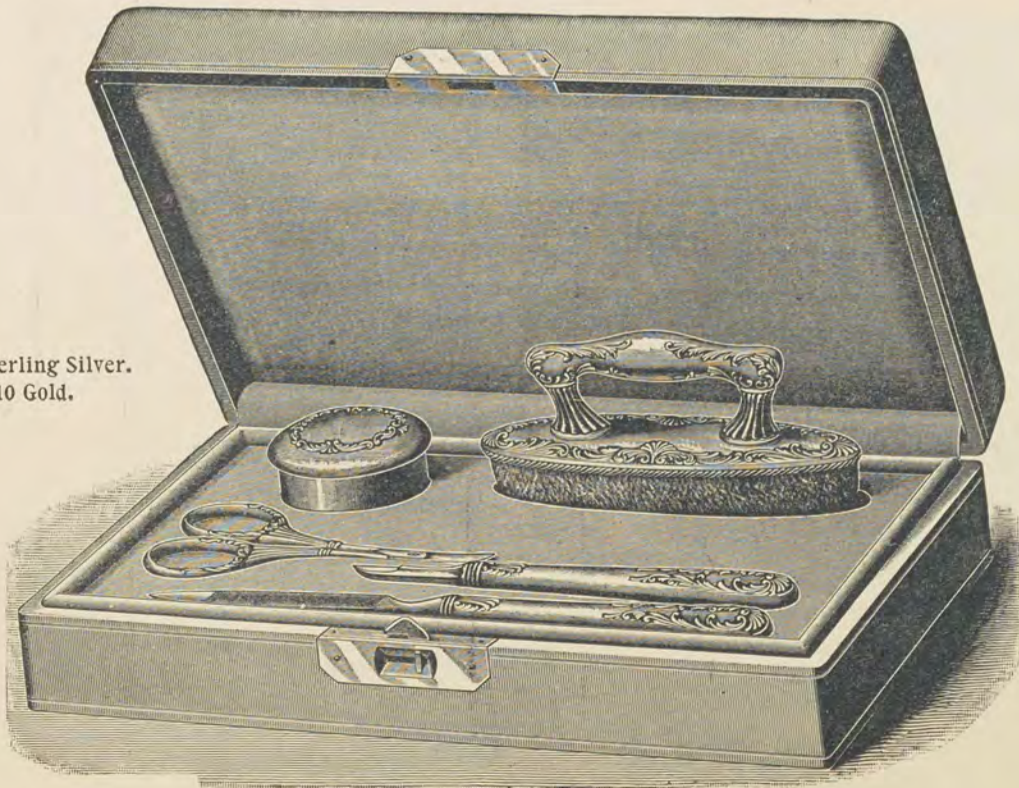




No. 1. Sterling Silver.
No. 4. 1-10 Gold.



No. 2. Sterling Silver.
No. 5. 1-10 Gold.



No. 3. Sterling Silver.
No. 6. 1-10 Gold.



Foster & Bailey

100 Richmond Street
Providence, R. I.

We have added

Manicure Goods

to our very extensive line, and at prices that beat the world. They are put up in sets in a kid box lined with chamois, and can be carried in a trunk without taking up much room. Just the thing for people traveling. We show these quarter size.

Nos. 4, 5 and 6 are tenth gold, and are beauties.

Read below the line of goods we manufacture and guarantee:

Rolled-Plate Watch Chains

Our chains can be safely sold to the best trade, and guaranteed as superior quality. No chance of poor quality where chains are stamped F. & B.

$\frac{1}{10}$ Gold Vest and Dickens Chains

Soldered with 10 K. gold solder. Will assay 1-10 gold.

Chain Mountings

We are headquarters, and make everything in this line.

"Mount Hope" Buttons

Superior to any other button in the world. Easy to put in and take out of the cuff.

Link Buttons

We are making some very pretty styles in Roman, chased, engraved and plain, with and without stones, sterling silver and rolled-plate.

Locket and Charms

in endless variety.

Sterling Silver Goods

Match Boxes, Manicure Articles, Shoe Buttoners, Embroidery Scissors, Garters, Paper Cutters, Ladies' Seals, and various Novelties, all 925-1000 fine.

Solid Gold Locket

With diamonds and without. This is a beautiful line, and solid throughout.

Bracelets

Curb Bracelets in all sizes, with padlocks and snaps, chased and plain polished, Roman, rolled silver plate and sterling silver. We make padlocks, with keys and also with a push snap, which are very popular.

Neck Chains and Lorgnette Chains

Pins

Lace and Cuff Pins, with gold fronts, engraved; also trimmed pins, Scarf Pins, Baby Pins with chains. Also Baby Buttons with chain. Sword Pins with scabbard and chain.

Glove Buttoners and Shoe Buttoners

Crosses

Four sizes of gold filled.

Earrings

We make a nice line in engraved and trimmed.

Eye-Glass Chains

in gold and plate.

WE RECEIVED FOUR AWARDS AND A MEDAL AT WORLD'S FAIR.

Foster & Bailey



FOSTER & BAILEY

919



100 Richmond Street, Providence, R. I.

Jewelers & Silversmiths

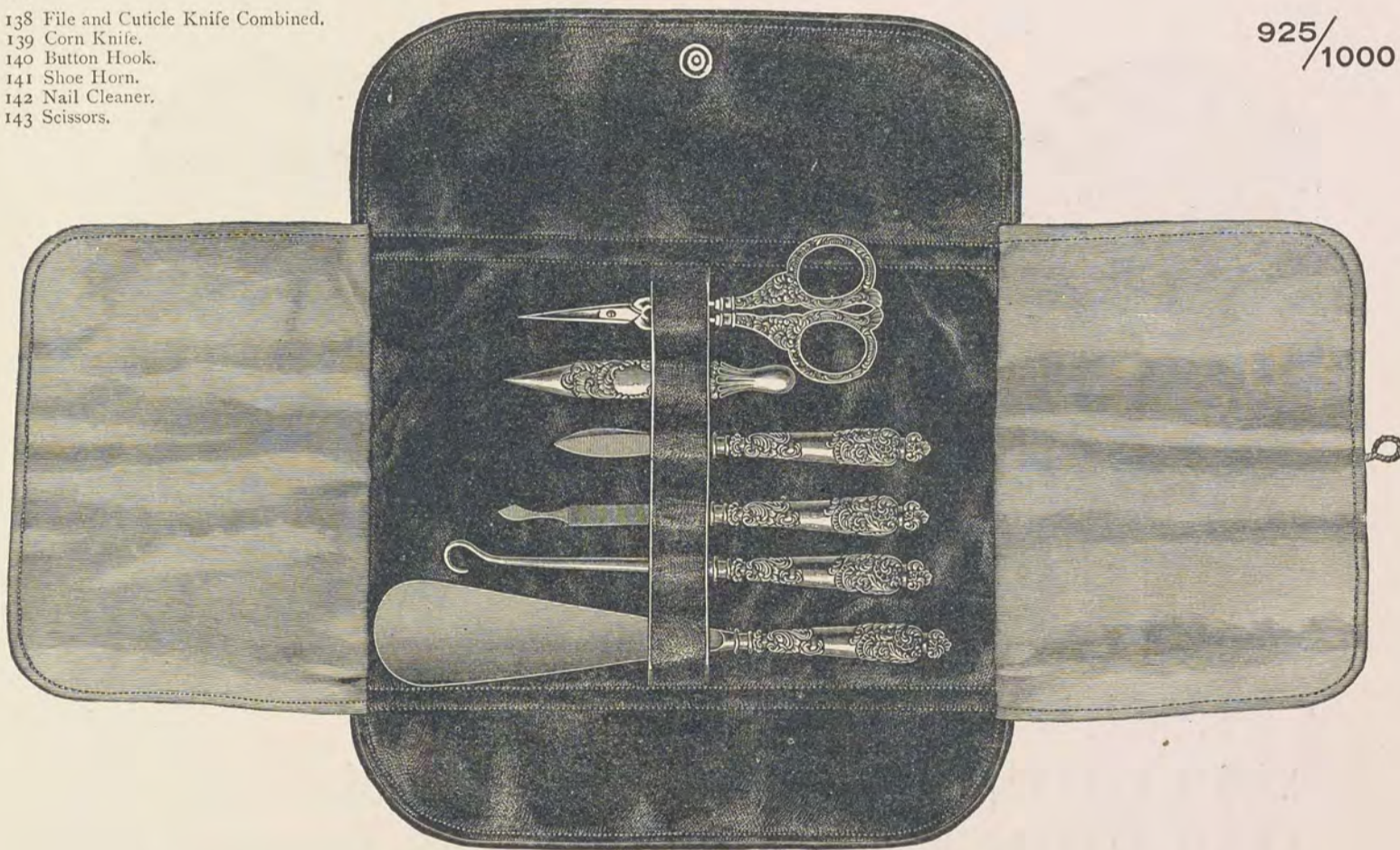
New Thing for Holiday Trade and All the Year Round.

A beautiful set of **Manicure Goods and Shoe Horn and Buttoner**, put up in a fine leather roll lined with velvet, with pretty silk flaps. Just the thing to put into a gripsack, as it is soft and pliable and rolls up small. These are sold at such a price as will enable anybody to buy one. The steel parts are of the best.

Set No. 7

- No. 138 File and Cuticle Knife Combined.
- " 139 Corn Knife.
- " 140 Button Hook.
- " 141 Shoe Horn.
- " 142 Nail Cleaner.
- " 143 Scissors.

925/1000 Fine



Set No. 7. Half Size.

Embroidery Scissors, Manicure Goods, Strawberry Emery Balls, Pen-Wipers (just see one of them), Pin-Cushions, Pocket Combs in little red cases, Paper-Cutters, Orange Knives, Garters, Pocket Knives, Seals, Glove-Buttoners, Coat and Hat Marks, Key Chains and Rings, and lots of fast-selling articles.

Sterling Silver

Manicure Set, No. 1

Tray . . .	No. 54	Corn Knife	No. 59
Polisher Box	" 55	Cuticle Knife	" 60
Polisher . .	" 56	Short Scissors	" 61
Paste Box . .	" 57	Long Scissors	" 70
Powder Box	" 57	Box	
File	" 58		

Sterling Silver

Manicure Set, No. 2

Polisher . .	No. 56	Cuticle Knife	No. 60
Paste Box . .	" 57	Short Scissors	" 61
Powder Box	" 57	Long Scissors	" 70
File	" 58	Box	
Corn Knife	" 59		

Sterling Silver

Manicure Set, No. 3

Polisher . .	No. 56	Cuticle Knife	No. 60
Paste Box . .	" 57	Short Scissors	" 61
File	" 58	Box	

WALTHAM

18-Size, 17-Jeweled

Hunting or Open-Face

Center Pinion Jeweled in both Upper and Lower Plates



CRESCENT STREET, Nickel.

APPLETON, TRACY & CO., Nickel.

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No. 35, Nickel.

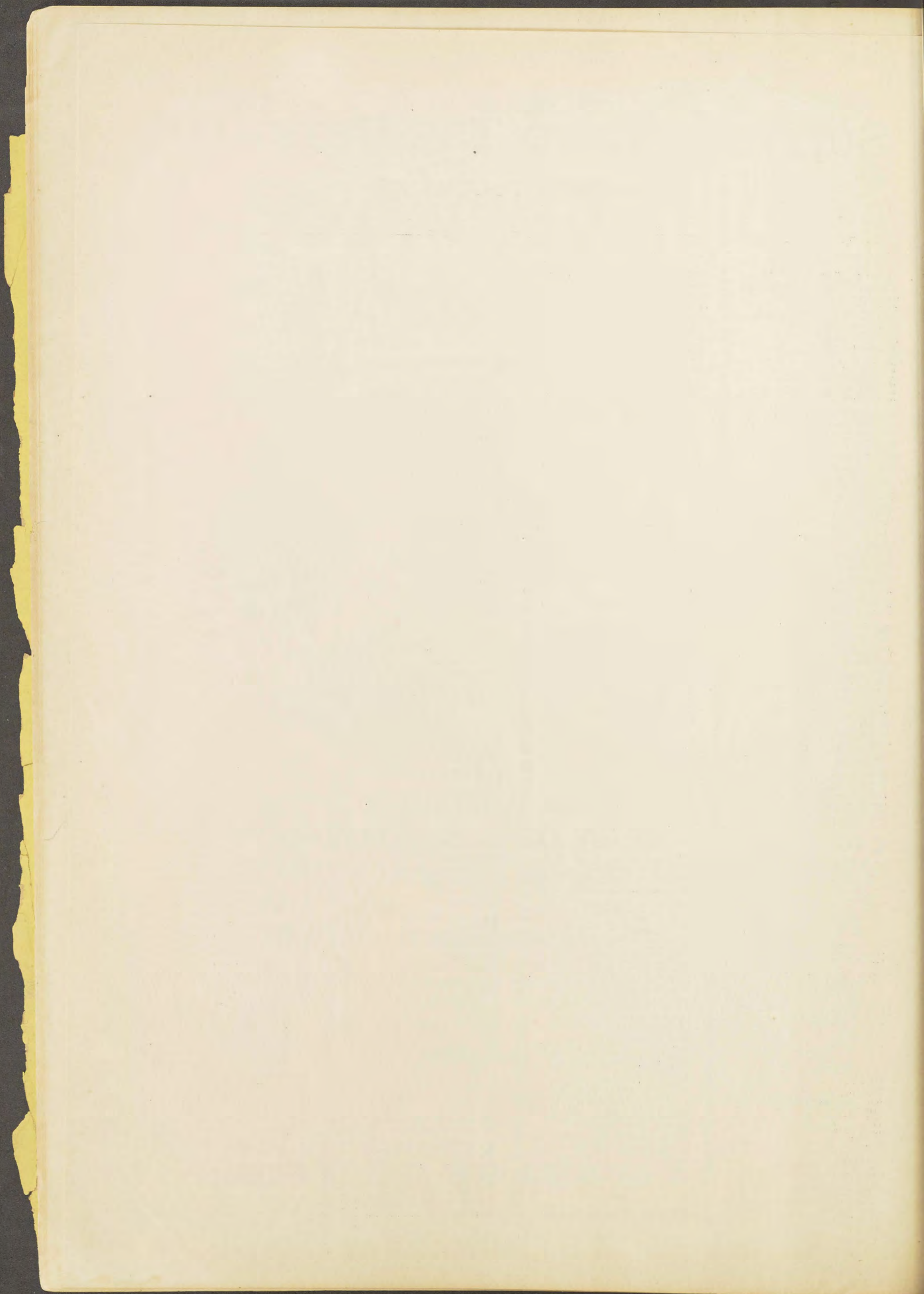
NO. 25, Gilt, Damaskeened.

The manufacture of the above grades has been discontinued. The limited number on hand and in process are being refinished, ornamented and Center-Jeweled in both Upper and Lower Plates, making them 17-Jeweled.

THEY ARE ENGRAVED "17 JEWELS."

No more of these movements will be obtainable after the present quantity is exhausted. The advantages of Center Jewel in Lower as well as Upper Plate will be evident to all watchmakers.

SUPPLIED BY JOBBERS IN AMERICAN WATCHES



THE KEYSTONE

VOLUME XV.

PHILADELPHIA, DECEMBER, 1894.

NUMBER 12

THE KEYSTONE

A MONTHLY JOURNAL DEVOTED TO THE INTERESTS OF THE RETAIL JEWELRY TRADE.

S. H. STEELE, PUBLISHER.

Subscription—One Dollar per year, postpaid, to all parts of the United States and Canada. \$2.50 to Foreign Countries.

Payment for THE KEYSTONE, when sent by mail, should be made by a Post-Office Money Order, Bank Check, or Draft, or an Express Money Order. When neither of these can be procured, send the money in a Registered Letter. **All Remittances should be made payable to THE KEYSTONE.**

Change of Address—Subscribers desiring their address changed, should give the old as well as the new address.

Advertisements—Advertising rates will be furnished on application at this office, and will be found far less in proportion to the edition and circulation of THE KEYSTONE (the main element of value in advertising) than those of any other jewelry trade paper in the world. No advertisements but those of a reputable character will be inserted. The Publisher reserves the right to reject or modify any advertisement offered; and also to discontinue, at any time, advertising for any advertiser.

To Advertisers—Copy for advertisements must reach us by the 25th of each month to insure insertion in the issue of the following month. Notices of changes in advertisements should reach us not later than the 20th of the previous month.

Correspondence—We invite correspondence on all matters of interest to the trade. Correspondents must invariably give their name and address. We do not, however, hold ourselves responsible for the opinions of our correspondents.

All communications should be addressed to

THE KEYSTONE,
19TH & BROWN STREETS,
PHILADELPHIA, PA.

CHICAGO OFFICE, 103 STATE ST.

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REALIZING as never before how swift is the flight of time, again we extend a Christmas Greeting to our myriads of readers, and trust that a remunerative holiday trade will prepare them to celebrate with becoming joy the awe-inspiring event which the approaching festival commemorates. Many of them, we regret to say, are not oversanguine; but even if trade do not reach its normal volume for this month, it is consoling to be assured that the dense clouds of prolonged depression which darkened the commercial horizon one year ago have lifted, and that the new year will usher in at least a lustrum of uninterrupted prosperity. There is consequently little reason why any of us should be cast down during this season of proverbial rejoicing, and the great majority we trust will have temporal as well as spiritual cause for elation. We ourselves shall stand by the death couch of the old year without any ill-feeling toward the dying occupant, and shall look confidently to his promising successor to make good all deficiencies. It pleases us, as is the custom, to extend a fraternal greeting to our readers, and to wish them all the blessings, spiritual and temporal, characteristic of this hallowed season.

Ownership of Engagement Rings.

A Wisconsin correspondent, with whom the course of true love has evidently not run smooth, over the significant *nom-de-plume* "Disgusted," puts this question to us: "Can a lady who has broken off her engagement of marriage be compelled by law to return the engagement ring to the donor?" As far as we can learn, the opinions of lawyers are as much at variance on this matter as the opinion of lovers. An important decision on the matter, however, was recently rendered in Vermont. A young man sued to recover an engagement ring which he had given to a young woman, who, after accepting the ring, repudiated the engagement. The judge decided that it must be returned, or else that the recipient must fulfill the conditions under which it was presented. The English courts some years ago decided that an engagement ring is not recoverable under any circumstances. "Disgusted" may find some additional

consolation in the rather complicated case of two Brooklyn lovers. The gentleman bought the ring on the instalment plan. The lady wore it proudly for a time, but one day modestly went to her boudoir, changed her dress and her mind simultaneously and forthwith sold the ring. The question now is, who owns the ring, the jeweler, the disappointed lover, his faithless fiancée, or the final purchaser? Verily love laughs at more than locksmiths.

The interesting question of the ownership of jewels given by a husband to his wife, from whom he subsequently obtained a divorce, was argued last month in a British court. The husband's contention was that the jewels were given to his wife only during the continuance of their harmonious relationship. The wife maintained that the jewels were absolute gifts. The registrar, to whom the matter was referred, gave judgment in favor of the wife, and on appeal the court upheld the decision of the registrar. A somewhat similar case was tried recently in this country, when a divorced husband sued his quondam wife for possession of half the wedding presents—or the value. The judge decided in the wife's favor in this case also, on the grounds that all the gifts were presented to her without specific reference to the husband. The weaker sex have evidently the sympathies of the jurists.

Russia's New Ruler.

The accession of Nicholas II. to the throne of all the Russias has made an apparently unfitted twenty-six-year-old, without previous training for so appallingly responsible a mission, absolute master of the destinies of over 120,000,000 people. From what we



Nicholas II.

have learned so far of the views of the youthful monarch, he seems to be quite as liberal as his father, and quite as anxious to prosecute a pacific policy in relation to all the powers. His proclamation, announcing the death of the late Czar, had this significant avowal: "In this sad and solemn hour, when ascending the ancestral throne of the Russian Empire and the Czardom of Poland and the Grand Duchy of Finland, indissolubly connected therewith, we, in the presence of the Most High, record our solemn vow that we will always make our sole aim the peaceful development of the power and glory of beloved Russia, and the happiness of our faithful subjects." The

We take much pleasure in returning thanks to the unexpectedly large number of jewelers who considered our new cover design worthy of a special letter of eulogy. So intelligently critical were some of these communications we much regret that lack of space prevents their publication.

phrases of a proclamation mean little, however, and it is still a matter of speculation whether the death of Alexander III. may prove a blessing or a curse to the Russian millions.

Nicholas II. is described as studious and thoughtful, and likely to shine, if at all, in a civil rather than in a military career. He has traveled extensively, and during the past few years devoted himself to the study of the problems of government with a creditable seriousness. Much has been written in disparagement of the young Czar as to the alleged weakness of his character, but it is questionable whether the lack of an imperial will and of imperial obstinacy, if such there be, is a deplorable defect. On the contrary, it might prove the redemption of his myriad subjects. It is only by accident, it must be remembered, that Russia has still a despotic monarchy. Alexander III. found, on his coming to the throne, that his father, Alexander II., had prepared on the day before his assassination, a ukase granting the petition of his people for a parliamentary government. The advisers of Alexander II. urged Alexander III. to issue the ukase, but the latter took other counsel, destroyed the precious document, and spent his life, in consequence, in dread of assassination. Nicholas is not in vigorous health. The robustness which enabled the dead Czar to withstand anxieties and dangers which would have wrecked a weaker man, is wanting in his successor, and in this fact lies hope for his subjects. Will he consult his own happiness by consulting the happiness of his people? Will he gain a glorious immortality by issuing his grandfather's ukase granting his subjects a parliamentary government and, as we say in the United States, the right to life, liberty and the pursuit of happiness? What a grand opportunity has the youthful Nicholas!

Amid general rejoicing he was married on November 26th, to Princess Alix of Hesse, to whom common report ascribes talent and a strong will. Proof of this latter was furnished by the fact that even the Russian crown could not induce her to condemn the religion of her German forefathers, as enjoined by the rubrics of the Greek church. Her husband, probably by her wish, signalized his marriage by issuing a manifesto of clemency, remitting arrears of taxes, and proclaiming amnesty to hosts of prisoners, and the regal couple seem to have entered on wedded life blessed by a goodly proportion of their people. Did she desire to cut a prominent figure in Russian politics, history would furnish the young Czarina with numerous precedents. No less than five women ruled over this vast empire during the eighteenth century, two of whom, the great Catharine II. and Elizabeth, history has dubbed infamous. The wife of Alexander II., if we remember rightly, was credited with influencing the termination of the Crimean war, and with having urged the Russian invasion of Turkey, in 1877. That the young Empress has such ambition or inclination is questionable, and even had she, a political rôle is unfashionable in the feminine regal circle of our day. The example of her estimable grandmother, Queen Victoria, will, no doubt, have more attraction for her than that of the clever but unscrupulous Catherine.

Another First-Class Power.

If, after the disruption of the Ottoman Empire, it had been prophesied that ere the close of the nineteenth century yet another non-Christian nation would rank among the first-class powers of the world, the prophecy would have gained little credence. Yet to-day Japan—a fighting and con-

quering non-Christian power—steps into the front rank, and will henceforth take a prominent part in the councils of the family of nations. The fall of Port Arthur, the Gibraltar of China, has practically made the land of the moon-eyed celestials a suppliant, and the fulfilment of the terms of peace will give Japan a formidable exchequer. Already the Christian powers are making obeisance to their heathen sister, and our own country has just concluded a treaty with her which means our recognition of Japan's status as a first-class power, entitled to all the respect pertaining to that class.

The result of the war is a victory for civilization, and for the Chinese people themselves. "Better fifty years of Europe (or Japan) than a cycle of Cathay." The eye-opening invasion of the unwieldy empire will unquestionably loosen the wheels which have been so long clogged, and awake the Chinese powers that be to a realization that progress is necessary to their country's independent existence. Peking, the nation's capital, is the next place to be attacked by the doughty Japs, and this city is likely to prove the Appomattox of the struggle. Then will begin a new and brighter era in the history of the Orient, if not in the history of the world.

Our Bonded Indebtedness.

The addition of \$100,000,000 in one year (\$50,000,000 in February last and \$50,000,000 last month) to the bonded or interest-bearing debt of the United States has an alarming appearance only to those unacquainted with the fiscal history of the United States. The highest point reached by the bonded debt was \$2,381,530,295. These figures represented that debt on August 31, 1865. The interest charge on that vast sum was equal to \$150,977,698 per annum. Then began the national effort to pay off this debt, for the success of which history affords no parallel. From July 1, 1865, to July 1, 1892, covers a period of twenty-seven years, and in that period the interest-bearing debt of the United States was reduced \$1,796,493,195, which was at the average annual rate of \$64,684,933. The payments by quadrennial or presidential periods were as follows: 1869, President Johnson, \$219,469,773; 1873, President Grant, \$450,172,022. During the second term of President Grant there was an increase of about \$1,500,000. For the four years ending June 30, 1881, President Hayes, the reduction was \$72,320,750; 1885, President Arthur, \$443,416,800; 1889, President Cleveland, \$366,296,960; 1893, President Harrison, \$244,816,890. Thus was the debt reduced till it amounted only to \$585,029,330 in February last, when it was increased by the \$50,000,000 loan then placed. In the twenty-seven years the interest payable on the debt fell from nearly \$151,000,000 in 1865 to \$22,894,194 in 1893. Needless to add that this record, which astounded the world, is the pride of every American.

The sale of \$50,000,000 worth of bonds last month was necessary to protect the credit of the government and bridge over a temporary deficiency in revenue. The means are generally effective, but not commendable. Running the country into debt to pay its debts has not the impress of reason, and is simply the penalty of mischievous fiscal legislation. Placing such a loan, too, may defeat its own object, for purchasers are at liberty to pay for the bonds with gold drawn from the Treasury, which the loan is intended to replenish. In February last, for instance, the bond sale of \$50,000,000 increased the Treasury supply of gold by only

\$38,000,000, the remaining \$12,000,000 being drawn to pay for the bonds. The gold was not, of course, actually drawn out and paid back, but Treasury receipts for gold were deposited against an equal amount of the bonds, so that the actual supply of gold was not increased thereby. Our fiscal legislation in the past has been too largely experimental, and there is crying need for improvement in the entire system.

A most significant and reassuring fact in connection with the bond issue, is the unlimited confidence in the government credit revealed by the bidding. The unique absence of even a shadow of friction in negotiating the loan, is a guarantee that almost any draft made by the government upon the private financial resources of the nation would be promptly honored. It is to be hoped that prompt and desirable currency legislation will make further bond issues unnecessary.

Immigration Largely Decreased.

The report of the Superintendent of the Bureau of Immigration shows that the total immigration into the United States during the fiscal year 1894 amounted to 288,028, against 502,917 last year, a most remarkable decrease. Nor is this startling check to the migratory movement confined to any one country or section of Europe. The number of arrivals from Germany, according to the report, has fallen off 68 per cent.; from Italy, 59 per cent.; from Sweden and Norway, 51 per cent.; from Russia and Poland, 74 per cent.; from Great Britain and Ireland, 66 per cent.; and from Hungary, 64 per cent. Furthermore, the Superintendent estimates, in the absence of complete official data, that the number of steerage passengers who have returned to Europe since October, 1893, is greater than the number of steerage passengers who have landed in this country during the same period.

The Department Store Question.

The ambition of the modern department store to own the earth has brought down on it the anathemas of nearly all trades, from jewelers to undertakers. The anathemas, however, seem to have been very ineffective, for the monster emporiums pursue nonchalantly the even tenor of their all-grasping way, in contemptuous disregard of, and apparently unaffected by, the kicking of the aggrieved. We may, consequently, settle down to the conviction that the department store has come to stay, that it is to be a permanent and formidable competitor. In fact, the news comes from New York, where the department store has been particularly mischievous, that ground has been purchased on which will be erected the largest store of this kind in the world.

What Attracts the People

The important question is "Why do the public buy jewelry, canned tomatoes, boots or tooth powder in a dry goods store in preference to a jewelry, grocery, boot or drug store?" Not always because of cheapness. For instance, John Wanamaker, in this city, charges *more* for ice cream than the regular ice cream saloons, of which he is so formidable a competitor, and recently, for our own information, we priced an opera-glass holder in this store, which we afterwards purchased at a less price in a neighboring optician's. One word in the English language contains the secret of the popular predilection for the department store—advertising; and it is unfortunate that the venders of specialties seem so slow to appreciate the fact. Their slowness, in this regard, was made peculiarly

manifest at a recent meeting of New York City retail grocers. The Brooklyn grocers, some weeks previously, passed a resolution advocating a boycott of all dry goods stores that sold groceries, but the effectiveness of such a boycott was ridiculed by the New Yorkers. "The talk of boycotting," said one, "is all foolish. The money of the department stores is just as good as ours, and if they want to go into the grocery business they have the right to. Our business is to run our own business and compete with them. We can do that, and that's all we can do."

Said another, "The same sun shines for all, and the same ashman 'tends to us all. The dry goods stores are all right. If the retail grocers can't compete with them, then they are big fools, and had better give up the business. The method the dry goods stores adopt is to entice the people in to buy. That is all right. That is the method the retail grocers should adopt"

Another gave an instance of the futility of preventing department stores from buying. "A department store was buying pickles of an agent and selling them at less than cost. A committee of this union went to the agent, and the agent refused to sell any more. As soon as the store manager heard of it he cabled to Europe, and bought 100 barrels of the pickles from the manufacturers cheaper than he ever bought of the agent. Their money is as good as ours. We sell crockery. The department stores might complain of us for that. We sell liquor. The liquor stores have as much right to complain as we have. We make them compete with us; we must compete with our rivals."

Another practical, if not very conscientious, individual said: "The dry goods stores get the trade by fooling the people. The American people want to be fooled. The man who is the cleverest at it gets the money. If we can get trade by making the people believe that we sell cheaper than our neighbors, that's legitimate business, and that's what we ought to do—not stand and complain. It's our business to get trade any honest way we can."

Each of the speeches breathed the right spirit, but each of the speakers stopped short before pointing out the *how* to compete successfully—which is, of course, by advertising.

A few days ago we read in the prolonged advertisement of a dry goods house in this city, a jewelry announcement. It ran as follows: "Cheap jewelry—too cheap for jewelers to handle. The average jeweler abhors a reputation for cheapness, and hence leaves those beautiful and fine-wearing twenty-five-cent stick pins, etc., to the dry goods man to handle." This is fooling the purchaser with a vengeance, and to counteract the effect, never a word was said by a jeweler. Another dry goods store watch announcement runs thus: "Timekeepers of a grade that were precious a generation ago are within almost any one's reach now. We buy them and sell them just as we buy and sell washtubs—get every advantage that taking largest lots gives, and pass them along with a very modest profit added. * * The time has passed when the purchase of a good watch required money enough to obscure your future prospects in life." Then followed a list of prices. We searched in vain on the following day for a jeweler's opposition "ad" proclaiming the fact that he could furnish the watches at the same or a less price. A jeweler's announcement appeared almost side by side with the above, advertising a

\$75 watch. It was an eminently praiseworthy advertisement, but seemed to have a tone of exclusiveness that might possibly repel many watch-buyers. "One thing at a time" is a very excellent advertising principle, but it can be carried to extremes. In a case like this it would seem wise to adopt dry goods methods and mention in conjunction with a high or moderately high-priced article, other lower priced grades. It generalizes store capabilities, and those attracted by cheaper grades may very often be induced to purchase a dearer.

It was said at the grocers' meeting that dry goods houses sold flour below cost, referring to which a member of the now famous Committee of Seventy said, "If a dry goods man sells flour that cost him \$3.90 or \$3.95 a barrel for \$3.64, go yourself, send your wife, send your boy, send your clerk. Buy all you can of it." Surely good advice if the flour were the right brand, and if it were not—which is likely—the fact should be advertised and the public undeceived. Lack of space forbids our pursuing this all-important subject further at present, but more of it anon.

Possibilities of Building Societies.

As Philadelphians we are naturally proud of this appropriately-named city, and for very excellent reasons. We can boast, if we want to, of the largest public park in the world, the largest town hall in the world, some thirteen of the largest manufacturing concerns and business establishments in the United States, the only "State House," the only Liberty Bell, and a number of other only things that not unnaturally arouse the jealousy of the leisurely critics of our parvenu civic rivals. Philadelphia's proudest synonym, however, is "The City of Homes." How well this title is deserved may be a surprise to many of our readers. According to the United State census, the percentages of those living in tenement houses are as follows:

	Per Cent. of Population.
In New York	82.08
In Chicago	38.80
In Boston	37.46
In Philadelphia	4.90

And of families occupying a whole house:

	Per Cent. of Population.
In New York	12.00
In Chicago	35.04
In Boston	37.17
In Philadelphia	84.64

Could we compare the percentages of those in Philadelphia who own their homes in part or in whole with those who do so in our big civic sisters, the difference would be even more of a revelation.

"Why is this thus?" will naturally be asked by our readers. It is largely the beneficent result of the building and loan association system, so admirably conducted in this city, by the aid of which the lowest paid worker in a jewelry store can become in time the proud proprietor of his own little home. The economy of this system to a member is illustrated by the example of a case where a man had been paying \$30 per month rent; he borrowed from the association \$2,400 to buy a home quite as good as the rented place, on which he paid to the association \$24 monthly for 140 months. Thus he paid a total of \$3,360, or \$840 less than if he had been paying rent, and had a home valued at \$2,400 to show for it at the end of the 140 months, against no house on the other hand and \$840 out of pocket in case he had continued to pay rent.

Of course the building and loan business is done in other States and cities, but not to the extent that it is in Pennsylvania and Philadelphia. Truly, this is the "City of Homes," and not of

hives, and the fact explains our proverbial indifference to threadbare criticism. Surrounded by all the home luxuries, we can well afford to smile at the sarcastic pen products of a shivering penny-a-liner, in the attic of some sky-scraping architectural monstrosity by the Hudson or Lake Michigan. We are thankful for our good fortune, and have a Christian-like pity for the hived denizens of our civic sisters.

Building Societies and Factories.

But it is not alone in the procuring of homes that building and loan associations can be so advantageously used, but also in the erection of local factories. We learn from an article in the *Manufacturers' Record*, by D. A. Tompkins, of Charlotte, N. C., that there are in successful operation in the Southeast a number of cotton factories constructed with money raised on the instalment plan as the payments are made in a building and loan association. Mr. Tompkins had observed that in many towns there was a strong desire among the people to build and operate a cotton factory, but conceived it impossible to raise the capital at home, because, as a rule, few people in towns or small cities have much unemployed capital. It was further observed that in almost if not quite every one of these instances, one or more building and loan associations were in operation with accumulated cash in excess of what it was considered impossible to raise for the construction of a cotton factory. The conclusion was therefore reached that if a plan could be formulated by which a company could be organized whose capital stock was made payable in the shape of regular weekly or monthly saving, then any ordinary community could raise the money to build a factory.

Following out this line of thought, it was found that with shares of \$100 par value they could be paid in full as follows: (1) At the rate of \$1.00 per week per share the par value would be reached in a little less than two years. (2) At the rate of fifty cents per week the time would be a little less than four years. (3) At the rate of twenty-five cents per week the time would be a little less than eight years. Each of these plans of payment has been tried at Charlotte, N. C., and in each case the result has been successful.

The plan (2) of fifty cents per week per share, it transpires, is the most popular and the most suitable for all ordinary cases and places. At this rate the following would be the regular payments for about four years: On one share (\$100), fifty cents per week, or about \$2.00 per month. On five shares (\$500), \$2.50 per week, or about \$10.00 per month. On ten shares (\$1000), \$5.00 per week, or about \$20.00 per month. On twenty-five shares (\$2500), \$12.50 per week, or about \$50.00 per month. On fifty shares (\$5000), \$25.00 per week, or about \$100 per month.

In organizing a company each subscriber for stock makes the payments, as above indicated, either by the week or month.

On the basis of subscriptions aggregating \$100,000 there would be paid into the company in each year about \$25,000. With this amount of money the buildings could be constructed and paid for in the first year. Inside the second year one-third the machinery could be purchased and put in operation. In three years from the time of organization it would be usually entirely feasible to have the entire plant in operation, with some debt, which could be paid off as the instalments were paid in the last year. A capital of \$100,000 will build a mill of about 5000 spindles and 200 looms, which would furnish work for 100 hands.

Success :

A Series of Articles for Young Men, Pointing the Way
over a Rough Road.

BY GRAYBEARD.

II.

A month ago, on this page, I presented some general observations on the fundamental conditions necessary to a business success. Herein I shall pass from these generalities to a more specific mention of the needful qualities essential to success and the factors that go to the upbuilding of *character*, which, as I shall show in the final article, is the crown and glory of life and the highest attainment of human endeavor.

A vital requisite is *concentration*—oneness of aim—devotion to one object at a time. Some author, whose name I cannot recall, wisely says that the measure of a man's practical effectiveness is the amount of his voluntary ignorance—the amount of what he is content to leave unattempted. So many things nowadays are clamoring for attention, "so wide is art, so narrow human wit," that the man who would know one thing well must direct upon it the whole force of his efforts, resolutely turning his back upon the hundred inviting prospects which beckon to him with alluring finger. We must be able to say, with St. Paul, "This *one thing* I do." The reason there are so many "average" men is that so few realize the evil of intellectual and mechanical dissipation, the squandering of the energies upon a distracting variety of subjects instead of focussing them upon one. Many a promising young fellow just misses of becoming a great man by splitting up into two "middling" ones. The giants of law, of theology and medicine made epochs in their respective fields because they rigorously limited themselves to a single subject of thought, instead of careering over the whole encyclopædia. It is Bishop Butler giving twenty years to his "Analogy," Edward Gibbon laboring for eighteen years over "The Decline and Fal lof the Roman Empire," Kant worshipping half a century in the mine of Metaphysics, Sir Isaac Newton devoting half a lifetime to his "Chronology," Adam Smith toiling ten years over "The Wealth of Nations," who have done the monumental work which the world honors. The human mind is capable of just a certain amount of clear thought, and (especially in these days of keen competition) it does not often extend beyond the requirements of one position. A young man has no right to allow his friends to call upon him during business hours on irrelevant matters, because if he hopes to advance himself he has need of all that time for concentration upon the subject of his business. Diversions of thought are killing to the best endeavors.

A vital element in any success is the spirit of self-help. Help from without invariably weakens and debauches the mental and moral status; help from within invariably invigorates and strengthens. When one is aided in any way he has removed from him a certain stimulus and necessity to do for himself; he is stunted in his growth. It is energetic individualism which has produced all the great results in the world of trade. The young man who leans heavily on crutches from the beginning will scarcely have the courage to ever entirely throw them aside, and will hobble through life looking for dependence on others in all critical emergencies. In the fable, the peasant whose cart stuck in the mud prayed to Hercules to help him out; but the god replied, "Put thine

own shoulder to the wheel; heaven helps only those who help themselves." The difficulties and hardships of life are positive blessings to all of us. Peril is the element in which power is developed. The proverb has it that rich young men, who begin their fortunes where their fathers left off, generally leave off where their fathers began. Seventy-seven per cent. of all great fortunes are dissipated by the second generation, ninety-three per cent. at the end of the third generation. Inherited wealth is a "title-deed to idleness," and idleness is the sure forerunner of destruction. The world is crowded with molluscous men—limp people—creatures that lack mental backbone and moral vertebrae—whose only hope of "getting ahead" is in being *pushed* there by an outside force. The young man who would succeed must knock away all the props and buttresses and believe, with Pestalozzi, that no man on God's earth is able to help any other man to the only success which is *real*—the success which involves the broadening and strengthening of individual character. Instead of remaining one of the foiled potentialities of which all lines of trade are crowded—those subjunctive gentlemen who might, could, would, or should reach great success, but whose failure to do so is what their friends cannot understand—the young man should stand before society in the imperative mood, and strike out for the goal.

It is true, indeed, that human character is moulded by a thousand subtle influences; by example and precept; by friends about us, by the environment in which we find ourselves, by the spirit of our fathers and all the vast influences of heredity. But it is certainly true, also, that men must necessarily be the active agents in their own well-doing; and however much they may depend on others they are their own best helpers in all those efforts that make for great results and permanent advantage.

The self-reliant man does not look to models, but is himself a creator. Few men have achieved eminence in any field by servilely imitating some great example. Cultivate pliability of mind, adaptability, a tendency to look beyond and all around, besides looking straight ahead. When Opie, the painter, was asked the reason of his great success he said, "I mix *brains* with my colors." Mere industry and economy are not enough to win fortune, in these days of intense competition; there must be a constant exercise of intelligent and original thought. "Quick-witted Jacks always get ahead of the slow-witted giants." Utilize all your mental forces; dart at a chance like a robin at a worm. Your chosen calling is filled with bold, keen, subtle, bright-witted men, fertile in expedients and devices, who are perpetually inventing new ways of underselling, advertising, and otherwise attracting custom; and the young man who travels in the rut of old-fashioned methods will find himself outstripped in the race, handicapped as he is by conventional ideas and the worn-out practices of a worn-out past.

But there are some fundamental elements in a business success which are old as the eternal hills and enduring as truth itself. They do not conflict with any features which the evolution of trade has developed into vital essentials in these later days; on the contrary, they but emphasize their intrinsic worth in the face of every new condition that comes about in the ever-changing kaleidoscope of modern business requirements. The road of human welfare lies along the old highway of steadfast and faithful

well-doing; and it is the persistent and untiring ones who generally win the largest measure of success. Indefatigable industry and application on the part of men with only mediocre abilities have accomplished the mighty things which measure the material progress of the race. Fortune has often been blamed for her blindness; but fortune is not as blind as men are. In practical life, fortune is usually on the side of the industrious. Genius of the highest sort does not disdain the employment of these ordinary qualities of application, diligence, perseverance and patience. The very greatest men have been the least believers in the power of genius. Some one defined genius as only intensified common sense; another spoke of it as the power of making efforts; Buffon says of it, "It is merely patience." What enormous difficulties have been overcome by the employment of the twin virtues of industry and perseverance! I might fill this page with examples from life of the almost limitless possibilities, when they are directed by intelligence and sound sense; but the instances are found all about us in everyday life. Young man, depend upon it, slipshod effort, half-hearted attempt, a constant recurrence of "that tired feeling," will not win, even if you possess every other essential to success. "Perseverance overcometh all things." Persevere in thinking on your shortcomings, and how to amend them. Persevere in your efforts for all-around improvement. Persevere in *persevering* in all right ways that make for final and complete success.

When I next address you, in a month from now, Christmas, with all its trade potentialities, its sweet domestic joys, its potent spiritual significance, will have come and gone, and you will stand in the presence of a hopeful New Year, the midway of an eternal past and the eternal future. May that future, or as much of it as will be embraced within your lives, be tinged with the bright colors of radiant promise and luminous with the inner light of true success!

* * * *

IN writing the advertisement, attempt to focus the reader's attention upon a single thing. You will have better results in mentioning *watches only*, in an advertisement, than by enumerating all the various lines you carry; better still if you mention only a *certain kind* of watches, as Filled; better still if you mention only a *certain style* of that kind; best of all if you mention a *single example* of that style. A rifle ball does more execution than a load of shot; a handful of sand thrown against a wall makes no impression, while a pebble may leave its mark upon it. Concentrate, concentrate, concentrate!

* * * *

WHEN you overstate a fact in your advertisement, you lie to every reader of the newspaper that contains the advertisement. If the paper has a circulation of five thousand copies you are just five thousand times a greater liar, from an arithmetical point of view, than if you made the misrepresentation to a single customer over your counter.

* * * *

It is amazing what an amount of comfort a man will take out of simply spoiling some other fellow's inoffensive scheme.

* * * *

NOBODY ever finds for a man his own lost self-respect.

* * * *

THE man who never makes any mistakes never does any work that will outlive him.

The Christmas Store.

(Begun in November issue.)

The Christmas Window

Whatever of skill and taste you possess, in the matter of window-dressing, must be displayed as never before during the year, at this climax of the year's trade opportunities. Every fraction of your best wit is now called upon to produce the most telling effects; all previous efforts must seem to be cumulative to this point of supreme demand.

Fortunately for the window-dresser, the materials at his hand, in the Christmas season, enable him to furnish the window much more strikingly than at any other time during the twelve-month. Abundance of new goods, in the most beautiful forms, invite his cunning touch to produce effective arrangement in harmonious designs. From a standpoint of economy in expenditure, also, he is justified at this time in a little extravagance (in the way of providing materials for decoration) which might not be warranted in the duller months, because of the increased profits resulting from the increase of business at this season. While it is never well to encourage extravagance, yet a spirit of economy that runs to niggardliness must not dictate too strongly at this time to the window-dresser who is inspired with the happy thought which needs to be happily expressed in the window display. The average advertiser who is perfectly willing to pay for half-column ads. in the local paper, and spend good money in putting up posters and fence signs, experiences a sudden contraction of his liberality when it comes to buying white velvet, or potted plants, or nice carpentry, as a ground for his window show; and yet five dollars, or ten, or fifty, invested in window materials, may bring him better results in the way of attracting favorable attention (which is the object of all advertising) than his daily half-column and his printer's long bill. The window is the tongue of the store. It must tell its story as gracefully, as picturesquely, and with as much strength of utterance as possible. It dare not garble the tale in an unknown language, but must speak clearly and definitely, so that "he who runs may read." The Christmas window must adequately display the Christmas message which the Christmas store has to tell to the people, and it is therefore a false economy which would restrict the materials of that display to the meager necessities of midsummer trade.

An Inexpensive Window.

The foregoing assumes that the jeweler is fairly well-to-do, or is located in a town or city where one or more competitors require him to compete in window-attractiveness, involving a considerable expense in the rivalry. But there is a large class of jewelers who have very limited resources, and another class who have a monopoly of the trade in their section, and who have no immediate competitors that will compel the public to make comparison of ways and methods. To such, the expenditure of a considerable sum in the externals of their display is neither prudent nor necessary. An excellent effect can be produced at a little expense, when it is inspired by tasteful ingenuity.

We suggest a scheme for a six days' inexpensive display, the detail of the arrangement to be changed daily:

The scheme supposes that the window is four or five feet wide and the floor can be extended in a flat plane about that far back from the window.

Cover the floor of the window (which should be on a level with the knees of the observer out-

side, or not higher than the hips) with some lustreless white material, as cloth, crepé, fine muslin, etc. Similarly cover all the inner sides of the window with the same material, laying the materials in flutings around the corner supports, with rosettes or graceful festoons in the angles where the sides meet the ceiling. The effect to be produced is a solid, uniform white.

Buy yards and yards of "Christmas greens" in rope. Festoon these ropes of greens in the angles of the sides and ceiling, twine them about the posts, and let two long strands cross each other from opposite upper to opposite lower corners, inside the glass, producing an X against the glass.

Thus far the arrangement of the window is to be permanent for the week. The daily variation is made on the floor of the window.

On Monday, say, lay ropes of greens so as to form a "checker-board" on the window floor, the white spaces to be about four inches square. In each of these spaces lay an article for display, keeping to one line of goods as nearly as possible; such as watches only, or small plated objects only, etc. On Tuesday lay the ropes of green so that they form diamonds instead of squares, and modify the effect further by raising the articles above the greens, by putting small boxes beneath the white covering; of course putting different articles on display, also. On Wednesday form concentric circles of the greens, the inner circle about the size of a hat crown, with six inches intervening between it and the next circle, and so on to the outer circle. The spaces between the circles are to be occupied with goods on display, each circle holding to one description of goods only, and different in kind from the objects in the other circles. On the following days the arrangement can be further varied, and provision made for the display of large pieces, such as pitchers, fancy clocks, etc.

Use Your Wits

The foregoing outlines a very simple display, involving little expense and not a great deal of skill, but the effect will be quite fetching, if the plan is tastefully executed. What we desire to impress upon the reader is the excellent results that can be obtained if one will exercise a little thought upon these small things which are so fruitful of good returns. Get out of the conventional and hum-drum—be original—use your wits. Your window will be the talk of the community if you determine it shall be; and it need not cost you much to secure the vast benefits of this flattering public comment.

What is Your Practice?

Are you willing to lose the profit, rather than lose the sale?

The question is raised because of the inquiry of a correspondent, who states a case as follows:

In a small town, where everybody knows everybody else, and a little more of everybody else's business than everybody's own, two jewelers cater to the wants of the community. They are about alike in age, social standing, capital in business and all other conditions. Unfortunately, the intensity of their competition has made each the other's personal enemy, apparently, and they cannot meet to discuss any matter of mutual concern. We will describe them, severally, as Jones and Smith.

To Jones one day, there came an old customer inquiring the price of "the cheapest Elgin stemwind movement in an open-face nickel case." Jones had sold him, only a week before, quite a big bill of sundries, to establish a daughter in

housekeeping—a lot of silver-plated ware, knives and forks, two dozen solid silver spoons, a couple of clocks, several pieces of gold jewelry, etc., amounting in all to a tidy sum; and he made a good profit on it. Recalling this fact, the jeweler, Mr. Jones, said, "Well, Mr. A, you shall have it at pretty near cost this time, in consideration of your generous purchase last week. I'll say five dollars and a half, with my compliments." But Mr. A steps back a pace from the counter, puts his hands behind him, cocks his head on one side, and says with just the faintest touch of suspicion and disquiet in his tone, "Why, how's that? I just stepped into Smith's on the way up here and he said five dollars."

What is Jones to do? Attempt to make Mr. A believe that Smith's watch isn't all right, or is second hand? or to vociferously declare that Smith is a thief, doesn't pay his bills and could as easily afford to sell the watch for three dollars, since it is all profit to him, whatever the price? or to show Mr. A the jobber's bill and point out the exact net cost to the jeweler? or to answer "Well, if that is Smith's price, I will meet it, though it is too low to cover a responsible guarantee," and thereby increase A's suspicion that Jones's first offer wasn't at "pretty near cost," and that it is worth inquiring further into the prices he paid him the preceding week for his daughter's furnishings? or shall Jones take a stand on the principle involved, decline to meet Smith's price, lose the sale, and possibly lose the customer as well?

What would be your practice, under the same conditions?

Unquestionably, much hinges on the personality of Jones—his peculiar characteristics, his influence in the community, his appreciation of the ethics of trade, and all that. Assuming that he is an average American, with the average American's keen sense of right and judicial quality of mind, and the average American's ideas of fair play and "honor bright," the thing for Jones to do is to let the sale go to Smith. If he has any wit he will talk to Mr. A in a way by which he will gain more than Smith in the transaction—assuming that Mr. A does finally go to Smith for the watch. Jones will repeat the unanswerable arguments against price-cutting—the maintenance of guarantees, the need of proper profits to the seller to insure proper safeguards to the buyer, etc., and will make an application of the principle to Mr. A's own business, in order to better "point the moral." He can bring such reasoning to the matter as will inspire Mr. A with a high respect for the principle involved, and abiding confidence in the merchant who will maintain his position in spite of the prospect of the immediate loss of a sale. And the greater A's influence, the stronger the reason for adhering to this line of reasoning.

Jones preserves A's respect and inspires his confidence; and in subsequent sales to him will secure the outside price. Smith sells the watch, but creates a lingering doubt in Mr. A's mind as to the absolute reliability of a dealer who sells below the proper profit; and every subsequent sale to Mr. A must be at an inside price. Jones wins in the long run.

* * * *

A MAN lives too long, even if he dies at thirty, when he outlives his health, his character and his estate.

* * * *

MORE money is spent in newspaper advertising in Australia, in proportion to its population, than in any other country in the world.

New Goods and Inventions.

[The illustration and description of new goods and inventions as hereunder is a permanent feature of THE KEYSTONE, our twofold object being to keep the merchant jeweler thoroughly posted on the very latest and most salable goods, and the practical jeweler equally well posted on the newest inventions and improvements in tools and appliances used at the bench. For the benefit of the optician, we also illustrate and describe new optical goods and instruments in this department.]

A Pretty Nail-File.



A nail-file of rare beauty, with a handsomely ornamented sterling silver handle, has just been put on the market by Coddling Brothers & Heilborn, North Attleboro, Mass. The illustration shows the pretty scroll work ornamentation and dainty appearance of the file. The same design has been applied to a button hook.

A Handsome Watch Pocket.

A novelty which should take immensely with our lady friends is here illustrated. It is a sterling silver watch pocket—for outside wear—beautifully designed and finished, and richly ornamented. It will profit the trade to handle the pocket while the fad is fresh. It is a rare attention-attractor, and panders strongly to feminine taste for showiness. This novelty, with a host of others equally attractive in sterling silver, is being supplied the trade by J. T. Scott & Co., 4 Maiden Lane, New York.



A Musical Savings Bank.

A useful and entertaining novelty is the musical savings bank here illustrated. It is one of the now celebrated "Regina" music boxes with coin slot arrangement, each deposit in the slot being rewarded with a tune. The Regina is a musical novelty, rendering on one or two accurately tuned steel combs the most beautiful music and playing an unlimited number of tunes. The mechanism is of wonderful perfection and so strong and well finished that with ordinary care it will last for a lifetime. The cases are ornamental and highly polished. The tune sheets are indestructible, being made of metal, and are easily adjusted or changed. We recently examined with much interest a number of patterns of the Regina boxes in the store of A. Wolff, 194 Broadway, New York, from whom they may be obtained.



The Dentella Ware.

In our October issue we described a new line of silver-plated goods (the Dentella Ware) recently placed on the market by C. F. Rump & Sons, Philadelphia, and which are of special interest to jewelers seeking novelties for the coming holiday season. In the illustration below are shown the principal articles in that collection, an assortment of which will be sent to dealers for their inspection. The finish and quality are the best possible, while the prices are popular.

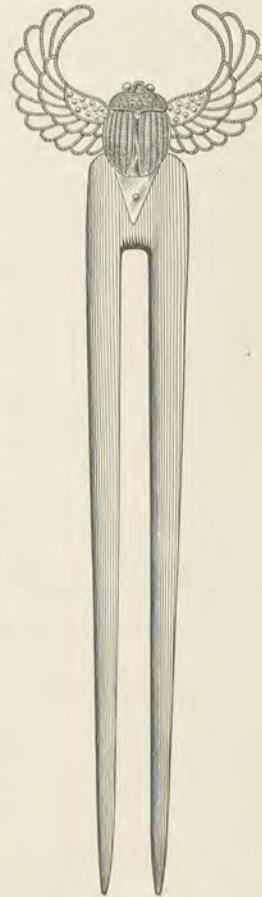


Scarabæus Jewelry.



Something entirely new and yet having all the prestige of hallowed antiquity, is the Scarabæus jewelry of Carter, Sloan & Co. 15 Maiden Lane, New York. The Scarabæus, or Sacred Beetle of Egypt, is the most distinguished insect in history. It was supposed that the Scarabæus was exclusively of the male sex, self-begotten, and therefore represented the Creator of the world. Modeled in various stones, it was used as a religious symbol, a charm, a medal struck in honor of some event, and a coin. The Egyptians were troubled with no coinage question, for a sacred image on any piece of stone made it money. It was a favorite talisman of the Romans, and has been extensively used in decorations, at various times, throughout the succeeding centuries. The great advances achieved by modern research in Egyptology have caused the Scarabæus to be sought after at the present time, especially in articles of personal adornment.

The effect of the Scarabæus alone, or with the outstretched wings of the Sphinx, in combinations of the precious metals, or in the varied and brilliant hues of enamel, combine to render these jewels peculiarly attractive to persons of refinement and cultivated taste.



The Perfection Staking-Tool.



The highly efficacious staking-tool here illustrated is manufactured by Kendrick & Davis, Lebanon, N. H. It is the result of the most careful examination of all the high-grade staking-tools, and combines all their most desirable features. Such new punches and stumps have been added as have become necessary or desirable by the constant development of the watchmakers' art. There are fifty-four punches and sixteen stumps, which will meet every possible requirement. The accuracy of the tool in every respect is guaranteed by the makers, and the price is moderate considering its rare merits. Those requiring such a tool will do well to get acquainted with this one before making a purchase.

A Sterling Silver Manicure Set.

An extremely pretty novelty, and one most admirably suited for a Christmas gift, is the sterling silver manicure set No. 7, placed on the market by Foster & Bailey, Providence, R. I. It has a file and cuticle knife combined, a corn knife, a button hook, a shoe



horn, a nail cleaner and ear-spoon and curved scissors. We show a cut of the set rolled up in a fine leather roll, lined with dark green velvet, and having beautiful silk flaps to fold over. When rolled it is soft and pliable, and wonderfully convenient to carry or pack in a grip.

A Brownie Cup.

A very pretty and certain-to-be-popular article is here illustrated. It is a Brownie child's cup in plated ware, made by Homan & Co., Cincinnati, Ohio. On it are represented in relief, eight of Palmer Cox's leading spirits:—Irishman, Dutchman, dude, policeman, Scotchman, Indian, judge and Rus-



sian. All are faithfully portrayed, even to their limbs and feet, which their creator said no one could imitate. It is a splendid piece of die work and has been universally eulogized by the trade. It is peculiarly adapted for a child's gift.

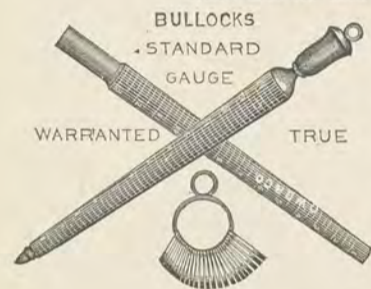
A New Bon-Bon Spoon.

This illustration here represents one of the prettiest spoons ever put on the market. Its introduction at this novelty-hunting season is peculiarly timely, and it may readily be pronounced in advance one of the best sellers in table ware stock. It is a bon-bon spoon,



in sterling silver, with plain or gilt bowl, and is manufactured by Simons, Bro. & Co., Philadelphia. The design is rarely beautiful and entirely different from any hitherto seen in spoonedom, while the finish more than sustains the high reputation of these well-known manufacturers.

Ring Sticks and Sizes and Steel Mandrels.



The illustration represents ring sticks, ring sizes and steel mandrel, made by O. W. Bullock & Co., Springfield, Mass. The trade will bear in mind that the ring sizes are made entirely from solid stock, thus doing away with soldering the ends of the rings. The sizes are standard gauge and very durable. An advantage in dealing with this firm lies in the fact that they will replace any article of their make that is not as represented, with one that is in all respects correct.

A Handsome Razor Hone.

In this gift-giving month a new article put on the market by the Pairpoint Mfg. Co., New Bedford, Mass., is likely to be given a good deal of attention by gift purchasers. It is, as shown in the illustration, a very beautifully silver-mounted razor hone, and is consequently as useful as it is ornamental. The ornamentation includes some very handsome scroll and flower work admirably executed. The hone would be salable at any time, but the season makes it peculiarly so. From the Alpha to the Omega of gifts there are few so acceptable as this, and a place should be found for it in every holiday stock.



Two Efficient Tools.

A very effective and very pretty four-blade screw-driver is here illustrated. It is manufactured by E. Vock, 430 Kent Avenue, Brooklyn, N. Y. Four different size blades go with the screw-driver; three blades are inside of the handle. The top can be pulled



out and the blades easily changed. The handle is nickel-plated. The blades are made of Stubs steel and carefully tempered, and the price is very moderate.

This illustration represents a combined case-opener and steel marker made by E. Vock, 430 Kent Avenue, Brooklyn, N. Y. The blades of these case-openers are made of hard-



rolled German silver and will not injure the case. The point of the steel marker is made of Stubs steel and carefully tempered, and the whole is nicely nickel-plated.

Diminutive Watch Cases.

We here show two cuts of dainty, diminutive Swiss watches, with very beautiful enameled decoration, being served to the trade by Jules Racine & Co., 180 Broadway, New York. A high perception of art prevades the figure designs, which are finished in colors, and the enamel feature surrounding the figures gives a richness of appearance out of all proportion to the price. In fact, the enamel finish at so popular a price is the surprising feature of the goods, and will be in the nature of a revelation to the trade. The case with the



single figure has a border setting of pearls, which gives it a purse-opening tone of exclusiveness. The other has a pretty chased border.

Colonel John L. Shepherd.

The announcement that Commander-in-Chief Lawler, of the Grand Army of the Republic, has appointed Mr. John L. Shepherd an aide-de-camp with the rank of colonel, will be pleasant news to the multitudinous friends of this popular gentleman. Mr. Shepherd has probably as many personal friends as any individual in the trade, and we question whether there is any whose personal friendship is more truly enjoyable. As New York agent of the Keystone Watch Case Co., as president of the New York Commercial Travelers' Association, as an enthusiastic Grand Army man, as a member of almost innumerable societies and clubs, as a cyclist of note, as an orator to the manner born, and as a story-teller of national fame Mr. Shepherd may be literally said to have met the public in general, and none will gainsay that they "are his'n." In him will be found the ideal conception of the American drummer—imposing in person, genial in countenance, persuasive in manner, restlessly energetic and perpetually good-humored, yet remarkably shrewd in business, with the requisite amount of mercantile incredulity, and the requisite talent to diagnose human nature. If the annals of drummerdom ever come to be written, we could suggest no better or more worthy frontispiece than the portrait of this massive and magnetic specimen of the fraternity. So mellifluous is he as an orator that he has been styled the Chauncey M. Depew of the jewelry trade, and we doubt whether the silver-tongued railroad president has accoucheured into

existence as many side-splitting anecdotes as he. His talents he uses no less to dispose of watch cases than to make the world brighter and happier, and



JOHN L. SHEPHERD.

unique success in both spheres has been the reward of his efforts. We salute Col. Shepherd, and trust that there are yet in store for him still higher honors.

Half a Century in Trade.

Fifty years ago, November 20th, Christian Preusser, head of the C. Preusser Jewelry Company, Milwaukee, opened the first jewelry store in that city, and began a business which has made his name known wherever Milwaukee merchants are known. He had recently come from New York, where he landed in the month of July, 1844,

with a small stock of goods, which he had intended to sell in some Western town, and chance had brought him to Milwaukee. He had some difficulty in procuring a store, but a shoemaker had kindly rented him half of his little place. From that day to this the business has prospered, and in all these years it has been second to none among the jewelry houses of Wisconsin.

When Mr. Preusser landed in Milwaukee, and had paid two dollars "pierage" for landing his two trunks, he found himself penniless. In those days stores were not for rent on every corner, and Mr. Preusser began to fear that he would have to go hungry before he could get a chance to sell his goods, but at the hotel where he stopped he got work, and there he earned his first American dollar fixing watches and clocks. From this small beginning the business continued to grow and prosper for many years under Mr. Preusser's guidance. In 1887 the Preusser Jewelry Company was incorporated, and Mr. Preusser's son and the young men who had been faithful employees for years, Messrs. H. P. Alstead, C. J. Kasten and G. E. G. Kuechle, became stockholders. Mr. Preusser is also president of the Milwaukee Mechanics Insurance Company, one of the great insurance companies of this country, and is one of the wealthy men of the jewelry trade in the West.

He was born in Idstein, Nassau, in 1826, and is still in good health, and his many friends will join with THE KEYSTONE in wishing this venerable and kindly pioneer jeweler many more years of health and usefulness.

SIMONS, BRO. & CO.

616 Chestnut Street

611 & 613 Sansom Street

Philadelphia

NEW YORK OFFICE, 19 Maiden Lane.

CHICAGO OFFICE, 96 State Street.

Silversmiths and Manufacturing Jewelers



Cream, No. x188. Sugar to match.



Cream, No. x314, F7. Sugar to match.



Key Ring, No. x593.

Although showing only Toilet Ware so far, we wish Jewelers to understand that we are silversmiths in the fullest sense of the word, making a full line of Everything in Sterling Silverware.



Match Box, No. x658 E.



Match Box, No. x345.



File, No. x273.



Embroidery Scissors, No. x467.



Pepper and Salt, No. x224.



Pocket Knife, No. x261.



Cork, No. x705.



Bon-Bon Scoop, No. x723.
Plain or Gilt Bowl.



Buttoner, No. x273C.
File, Corn Knife and Cuticle Knife to Match.

Buttoner, Cuticle Knife and Corn Knife to Match.



Edwin Beckwith is doing the Empire State for the Julius King Optical Company.

J. G. Lovinger, formerly in the retail jewelry business at Madison, Ind., is now traveling for D. Schroder & Co., Cincinnati.

A. H. Atwood, of the Towle Manufacturing Company, has been doing good work for the Towle product in the South. He says Southern dealers generally have bought liberally the present season in anticipation of a good holiday business.

Dana Ward, of Woodstock, Barger & Hoefler, Kansas City, has been making an excellent record for himself this season in the Missouri and Kansas territory. Our young friend is deserving of all his success, for he is a mighty fine fellow, if doesn't weigh a ton.

Carl Lochau, of the Juergens & Andersen Company, Chicago, though a new man on the road, is catching on in fine style.

J. C. Moreland, with Lapp & Flershem, Chicago, is greeting his Iowa friends during the present month.

Z. E. Chambers, representing B. F. Norris, Alister & Co., Chicago, in Iowa and Missouri, is calling on the trade in the former State. "Trade is decidedly looking up," said Mr. Chambers just before leaving for the West the middle of last month, "and I am looking for a nice trade on this my last trip for the year."

The many friends in the trade of George B. Bridestone, well known in the West from his long connection with Sigler Bros., of Cleveland, as traveler, will be glad to hear that his Colorado trip mentioned in a late number of THE KEYSTONE, is proving beneficial to him and that his health is much improved. He writes that he is getting better slowly but surely.

A. B. Chace, Chicago and Western representative of G. W. Cheever & Co., North Attleboro, closes the season with the present month. He will be among the trade with his new spring samples, early in the new year.

Max Noel is showing the holiday line of the Stein & Ellbogen Company, Chicago, among the trade in the Northwest this month, and he will never give up the battle until he hears "dem Christmas bells a-ringing." He is the same as ever, an enthusiastic worker and a genial, good fellow.

Charley Berkey, Michigan traveler for Benj. Allen & Co., has been enjoying a pretty fair trade this fall. He carries, in addition to the usual standard line of his house, a fine selection of holiday novelties.

W. D. Sisco has been enjoying a good trade this fall for the Ansonia Clock Company through the Middle West territory. He travels from Chicago.

The engagement of Norbert Gunzberger, the widely-known and popular New York diamond salesman, and Miss Delia Rosenthal, of Indianapolis, is announced.

The accompanying picture is that of F. J. Bross, who travels for the L. Bauman Jewelry Company, St. Louis, in Illinois, Kentucky, Tennessee and Missouri. Mr. Bross is a very popular salesman in his territory, where he often grows eloquent over the beauties and selling qualities of the Bauman Company's lines. He pays strict attention to business, and therefore has enjoyed good success from the beginning of his career as a road agent. He is twenty-nine years old, married, makes his home in St. Louis, and has been with the L. Bauman Company nine years. He entered the life of a "knight of the grip" six years ago, and his well-achieved success will continue him in his present position for years to come, should he so choose. In person, Mr. Bross is tall and commanding, rather heavy-built, his mustache and intelligent face attracting attention anywhere. He is a self-made American citizen, and a young business man of the progressive Western type.



F. J. Bross.

Fred. Merry is covering Missouri and Kansas for the Julius King Optical Company with good success.

J. A. Limbach, who covers the Western circuit for the world-famed Foster & Bailey line, has finished his labors for this year, and will spend the present month in Chicago. He has just returned from a trip to the Pacific Coast.

D. C. Bond, Illinois and Southern salesman for the Johnston Optical Company, Detroit, has been enjoying a good trade this season. He makes his home at Marion, Ind.

H. M. Tenney, the wide-awake and popular representative of Lapp & Flershem, will spend the present month hustling trade among his Indiana and Illinois customers.

Arthur Perry will be among the trade in the Northwest during December with a handsome line of holiday novelties from Lapp & Flershem, Chicago. Mr. Perry is one of the veterans of the fraternity in the West, and seems to grow more popular with his added years of service.

D. A. Wilkins, who flings his derby in the ring and fights for the great and only Ostby & Barton ring throughout the West, has just returned from a Pacific Coast trip. He will wait on the Chicago trade for the remainder of the season.

Ed. B. Hoffman is to-day one of the most enthusiastic of our Western salesmen. The good-will of the retailers in his territory, his firm, C. F. Happel & Co., Chicago, and a first-class fall trade for these times are the elements which have contributed to his happiness.

Thomas G. Baker, for so many years employed as traveling salesman for the Gorham Manufacturing Company, New York, covering a Northwestern territory, has leased his large stock ranch, eight miles from Denison, Texas, for a term of years, and has come back to New York to engage in the jewelry business or one of the kindred trades.

The "Home" at Binghamton has inspired the designers of souvenir spoons. One design has the "Home" engraved in the bowl of the spoon, while the top of the handle shows a scrolled border surrounding a gripsack. The second design has a similarly engraved bowl. The lower part of the handle is composed of the letters C. T. A. H. (Commercial Travelers' Association Home), surmounted by a well-modeled figure of a drummer carrying an overcoat and gripsack.

Wm. B. Gordon, of the Johnston Optical Company's force, has recently recovered from a three months' siege of typhoid fever, and is now out in his territory, which embraces Missouri, Kansas, Arkansas and Texas. He makes his home in Detroit.

W. H. Kinna, missionary with the Elgin Watch Company, tells us that he is still doing business at the old stand. Our tall, young friend is a gem from Gemville, and when he dons his store clothes and lights out with his samples of the Elgin Company's new, twenty-jeweled movement, you may expect storms, accompanied by vivid lightning.

E. H. Pudrith, with Eugene Deimel, the Detroit jobber, will be hustling among the trade up to the 20th of this month.

John P. King, of the Johnston Optical Company, Detroit, is interviewing the trade in Texas the present month. He is working his way home from a successful trip on the Pacific Coast.

George Frinck, of the Stein & Ellbogen Co., Chicago, is busy this month among his Iowa and Chicago customers.

M. H. Lebolt, with H. F. Hahn & Co., Chicago, is "on the wing" again this month. Lebolt never flies with broken pinions, either. He is now moving on Iowa and Minnesota.

Tom. Hoefler, of M. A. Mead & Co., says that on his last trip through his Northwest territory he was greatly pleased to see evidence of increased confidence among buyers. He found a general feeling among the trade that things will grow better from this on, and that business will soon again assume its normal conditions.

O. H. Hull, of "Pairpoint" fame, has just closed down his season's work, which has been a quite successful one. He spends this month in the Company's Chicago office, where he will welcome his friends in the trade in his usual cordial manner.

George L. Brenning, with the Dennison Manufacturing Company, St. Louis branch, has been doing some tall hustling this season. The result is that he will close the season this month well content with the world and himself.

Geo. E. Morrill, of Morrill Bros. & Co., Boston, was a pleasant caller at the Western headquarters of THE KEYSTONE last month. Mr. Morrill was more especially in the West to close out the stock of the Seery Manufacturing Company, Providence.

Robert Bonestell, whose picture is here shown, is perhaps one of the best known and most popular salesmen in the jewelry line on the Pacific Coast. He is a native son of the "Golden West," having been born in the city of San Francisco in 1869. His early school days were spent in San Francisco, afterwards completing his education at Belmont College at the age of eighteen.



R. Bonestell.

After leaving school he spent some time on a ranch, a life of which he is particularly fond, but being of an exceedingly energetic disposition, he was naturally drawn to commercial business and soon gave up his very congenial ranch life, and engaged with Levison Bros., of whom his father, the well-known and popular J. T. Bonestell, is a partner. After giving his attention to some of the minor details of the business, familiarizing himself thoroughly with it, he rapidly rose to a position of responsibility, and in a short time the house found that they could not better employ his energies than by sending him on the road. In this branch of the business, like all others, he proved an eminent success, it being a matter of pride with him that whatever he undertakes he does as well or a little better than any one else. His very gentlemanly bearing and genial disposition have won for him many friends in the trade, so that there is hardly a jeweler on the Coast who does not look forward with pleasure to a call from Mr. Bonestell. He was married in 1893 to Miss Fargo, a very charming young lady of San Francisco, and they have since made their home at San Mateo, one of the many delightful suburbs of San Francisco, their fondness for rural life making their home an especially congenial one. Mr. Bonestell's chief delight as a recreation from business is to ride behind a fine horse, and it would be hard to find anywhere a better judge of horse flesh among men of his age.

A. C. Charlesworth covers Iowa, Nebraska, Colorado and Wyoming for the Johnston Optical Company, Detroit. He reports business brightening up in his territory since the election.

T. H. Hollister, representing Hayden W. Wheeler & Co., New York, in the Middle West, is a hard-working, painstaking and popular member of the fraternity. Of course, he is a successful traveler.

Paul Shordiche is busy this month among his Wisconsin friends, and they will be well taken care of, too. He carries the line of Lapp & Flershem, the "Busiest House in America."

F. V. Kennon, whose hobby is the famous line of gold jewelry made by John T. Mauran, Providence, will be in the West the greater part of December, showing up the merits of trade-bringing and popular-selling goods.

Ed. Baumgartner, with Pairpoint Manufacturing Company in the Southwest, has finished his year's labors on the road, and is looking after his friends this month who happen to drop in at the Company's Chicago store.

Flint Bowen, Western agent for the Wendell Manufacturing Company, Chicago, and the Gilbert Clock Company, is doing Colorado and the Rocky Mountain country this month.

Among the foremost watch material travelers on the Western coast are Charles Weinshenk and A. M. Armer, who, in partnership, make a strong team, as is shown by the phenomenal growth of their business in the last few years. They are both young and energetic business men, which accounts in a large measure for their success. Charles Weinshenk is a native son of the Golden West, having been born in San Francisco in 1861. At the age of eighteen he entered the employ of Nordman Bros.' jobbing house, commencing at the lowest rung of the ladder and gradually working himself up until after two years he became traveling salesman, which position he held for ten years, leaving them in 1889 to start a wholesale material and jewelry supply business with A. M. Armer. A. M. Armer was born at Marysville, Cal., in 1864—like his partner, a native son. At an early age he came to San Francisco, and when seventeen years old started to learn the jobbing business with S. B. Dinkelspiel & Co., remaining with this concern in the capacity of bookkeeper and traveling salesman for seven years. He left them to go in partnership with Charles Weinshenk. Armer & Weinshenk, as the firm is called, occupy a large room at 207 Sutter Street. Owing to the personal popularity of the firm, who both have a personal acquaintance with the entire trade on the coast through traveling so many years on the road, their business has steadily increased until now they are one of the largest houses in their line.

(Continued on page 939.)

“If you want
a thing
done quickly
take it
to a
busy man”



WE are busy men—
 Diamonds, Silver Novelties,
 Holiday Novelties,
 French Onyx Clocks,
 Jewelry and Watches
 make us very busy men,
 but if you want an order
 filled quickly send it to us.
 This is especially true in
 regard to Diamonds—
 we do fill orders in this
 department with special care,
 and send you strictly fine
 brilliants. In fact, we
 are well equipped to take
 care of orders for every-
 thing needed by jewelers.

C. H. KNIGHTS & C.

Diamond Importers and Wholesale Jewelers

COLUMBUS MEMORIAL BUILDING

CHICAGO

How Some Opticians Advertise

AND HOW ALL SHOULD

Do Your Eyes

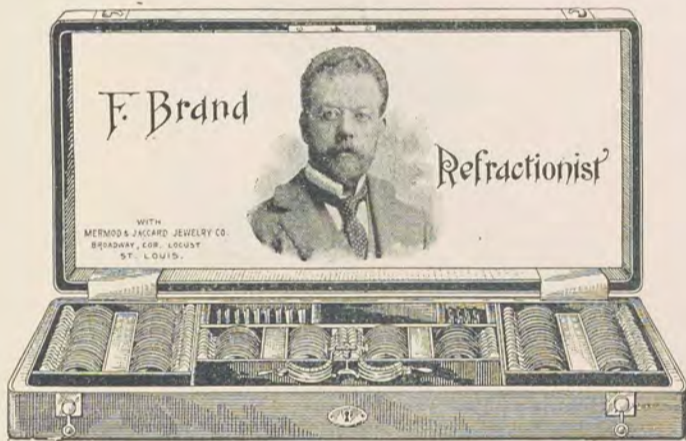
Need Care?
Allow Us
To
Call Your
Attention To
Our
OPTICAL
DEPARTMENT
Under
The Most
Experienced
Oculist.
We
Can
Assure
You
The Most
Satisfactory
Results
In
The State.

John Smith & Co.
Opticians

A Popular Actress

is usually the observed of all observers, and the best means of accurate observation is afforded through the medium of a pair of good Opera-Glasses. There's as much taste displayed in these as in articles of personal adornment, and we are ever leaders in all that pertains to an optician's line. Opera-Glasses are both desirable and beautiful Christmas presents.

JOHN SMITH & CO.
Opticians
Third and Market



It's a Luxury To Read



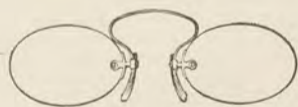
When what you read is entertaining and when you don't have to strain your eyes in perusing it. There is such a thing as wearing glasses when you shouldn't and not wearing them when you should. It is a mistake to do either. You can afford to be reckless with anything but the eyes, you can afford to take chances with anything but your sight. We keep all sorts of glasses for all sorts of eyes, and for the judgment of an expert as to what will suit your sight no extra charge is made. You will find in our fine and thorough stock everything to improve one's eyesight in the way of Eye-Glasses and Spectacles. Positively the **LOWEST PRICES** in the United States.

John Smith & Co.

DID YOU EVER SEE

a finer display of Opera-Glasses than we make? and **HAVE YOU EVER COMPARED** the prices with those of other houses? Opera-Glasses come legitimately within our sphere—so we handle them—and the same pains are exercised in pleasing and suiting you in these that we display in equipping you with Eye-Glasses.

JOHN SMITH & Co.



The Eyes are the Windows of the Soul.

Remember they are priceless. Take care of them, as no one will take care of them for you. If you need Spectacles or Eye-Glasses, buy them of John Smith & Co., Opticians, at Third and Market Streets.

S P E C T A C L E S
S P E C T A C L E S
If your eyes need medical treatment we won't sell you Spectacles simply to make a sale—and let your headache continue until you find the true cause from some one else.
We have men who know how, who look closely to the details and quality in all these things.
There will be no charge for telling you what your eye trouble is and for giving you advice—honest advice.
We make Glasses according to physicians' prescriptions, and guarantee accuracy and fine work.
John Smith & Co., Market St.

Annual Banquet of the New York Jewelers' Association

The twentieth annual banquet of the New York Jewelers' Association was given on November 15th in the world-famed Delmonico's. The habit of making a new record each year in the brilliancy and excellence of their regal entertainment is still cultivated with success by the metropolitan Association, and the latest was beyond measure the greatest of all. The year now drawing to a close has been an "off" year, it is true, in the jewelry trade, but in the banqueting hall there was no evidence of the fact. The gorgeous decorations, appropriately indicative of the vocation of the banqueters, the gaiety and hilarity that prevailed the scented atmosphere, the electric rays of a thousand lights dazzlingly reflected from the beautiful shining silverware, the savory and delicious viands, the sparkling and exhilarating vintage, and even the post-prandial oratory—all told the same story—satisfaction with the present, and bright hopes for the future.

The beautiful silverware, which, reflecting the light of many candelabras, added an enchanting brilliancy to the scene, was lent for the occasion by the well-known silversmithing concerns of the George W. Shiebler Co. and Dominick & Haff, while the magnificent creations in earthenware and cut-glass were temporarily transferred from the big establishment of Bawo & Dotter. Commingled with the silver and pottery on the several tables was a profusion of flowers, including the rose, orchid, smilax, luxurious chrysanthemum, etc., with a color-softening abundance of fern. In fact, so elaborate were the decorations and uniquely magnificent the banquet that the following well-deserved eulogy was elicited from Charles Stewart Smith, ex-president of the Chamber of Commerce: "I have been attending banquets for twenty years, and have sat at table in every part of the civilized world, but I have never seen or sat at a more beautiful or more artistically decorated table. I wish to compliment the New York Jewelers' Association on its achievements in this respect." A variety of musical instruments discoursed sweet music during the evening, and the selections were varied enough to please all tastes, from the most outrageously popular to the most fastidious.

The procession of guests moved towards the dining hall at 7.15 o'clock and encountered, as Byron would say,

"Nearer as they came, a genial savor
Of certain stews and roast meats and pilaus,¹
Things which in hungry mortals' eyes find favor."

The guests at the main table, which had among them three mayors present and prospective, were as follows: David C. Dodd, Jr., Frederic Taylor, Judge Noah Davis, Hon. Chas. A. Schieren, Hon. Wm. L. Strong, Augustus K. Sloan, Rev. John W. Brown, D. D., Hon. Franklin Bartlett, Charles Stewart Smith, Louis E. Bomeisler, Hon. Julius A. Lebkuecher, Anthony J. G. Hodenpyl.

Grace was said by Rev. J. W. Brown, D. D., and forthwith a couple hundred œsophagi were put in motion.

About nine o'clock, when the inner man had been well attended to, Augustus K. Sloan, president of the Association, arose and said:

"The time has arrived when it becomes my pleasant duty, as we good Masons say, to welcome you once more, and I think that the words of wisdom which we shall hear to-night will be of value to us for the year to come. We are all a band of brothers joined together for mutual protection and benefit, and it is one of the pleasant things in

life to witness how each of us strives to see how much money he can put into the pockets of his fellow-member. For the past nineteen years I have been content to sit down there and listen to you, and I thank you for the honor you have conferred on me by electing me this year to preside over you and appreciate the fact that I never was in better company in my life than at this present moment. (Applause.) I give you all a hearty welcome. You have enjoyed the dinner, but I know you will enjoy the good things in store for you. Our tables never were more beautiful than this evening. Gentlemen, please fill your glasses and rise.

TOAST:—"The President of the United States," which was drunk standing.

THE PRESIDENT (continuing).—I want to introduce to you several distinguished gentlemen who have honored us with their presence this evening, who are not on the regular list of speakers, but I know you will be glad to know them and hear from them, if but a word. The first gentleman I have the honor to introduce is well known to you—his name has been a household word for the last two months—Hon. Wm. L. Strong, Mayor-elect of New York. (Great applause.)

Mr. Strong was received with great applause. He said:

Mr. President and Gentlemen of the New York Jewelers' Association:—I guess I've got the appellation right. I have been studying it ever since I sat down. When I received your invitation I made up my mind I would accept. But one of your worthy members came to me and said "The



A. K. SLOAN,
President of the New York Jewelers' Association.

papers say you are no speaker," (laughter) "and we shall expect no speech from you, and I promise not to call upon you." I made up my mind that man would make a first-rate dry goods man. (Laughter.) In my business none of us has made any money for two years, and, on looking at the lousy faces I see here, there is only one business I would like to engage in—the jeweler's business. (Laughter.) I am well satisfied that I will not have any applications for office from any of you gentlemen after January 1st, because you dine like men who would not think a great deal of \$5000 to \$6000 a year. (Laughter.) I hope on your next twentieth anniversary you will have as lousy a band of gentlemen as I see to-night.

THE PRESIDENT—"Last year we had an election in Brooklyn, but we good old Democrats were not happy, so we turned to and helped elect a man whom in all honor I take great pleasure in introducing, the Hon. Chas. A. Schieren."

Mr. Schieren spoke as follows:

Mr. President and Gentlemen of the New York Jewelers' Association:—This is Mr. Strong's maiden dinner and maiden speech—as Mayor-elect. If he does as well for the next dinner and speech I think he will be fortunate. Once during my canvass I was presented with a hat at a hat factory, and strange to say that hat still fits (laughter), but if the people of Brooklyn are going to keep on, I shall have to visit that factory again. (Laughter.) It gives me great pleasure and I esteem it an honor to respond to your toast. The American jeweler is noted for his good taste and uniqueness. There is no sham about American jewelry—it is like our people, plain and solid. The people at the last election found a jewel and gave him such a brilliant setting that now they expect him to shine with an added lustre, in purity and honesty of purpose. (Applause.)

THE PRESIDENT—"Recently there was an election in Newark, N. J., and every one was

made happy, as the people selected a man well known for his uprightness. He is a member of our profession and also of the New York Jewelers' Association. It is gratifying to me to introduce the Hon. Julius A. Lebkuecher, Mayor of Newark."

Mr. Lebkuecher said:

I had not been expecting to be called upon on this occasion. I have been a member of this Association for many years, I have attended a great many annual reunions and I have always looked forward to them with anticipation and great pleasure, but I have always expected to be a listener, and between us that is what I ought to be. I thank you very much for this greeting and trust you will excuse me from further remarks. (Applause.)

THE PRESIDENT—"I take great pleasure in introducing Mr. A. J. G. Hodenpyl, president of the New York Jewelers' Board of Trade."

Mr. Hodenpyl spoke at length as follows:

Gentlemen, Members of the New York Jewelers' Association: I was highly honored in receiving an invitation to dine with you, and to enjoy your always agreeable company. I immediately wrote as neat and beautiful an answer as I could, which I gave into the hands of a messenger to insure immediate delivery, because I was afraid that the committee feared I would not accept the invitation. (Laughter.) I looked upon the invitation with a great deal of pleasure, for two years ago is the last time that I really enjoyed a square meal. (Laughter.) Last year we gave up our money that the poor out of work might be assisted. I speak of this because every family here represented gave us a helpful hand, and I would not speak of it at all, but that you will remember how that good object was followed by other associations, notably the Chicago Jewelers' Association, which came nobly to the front. Every effort that we made was successful, and for once the New York Jewelers' Association and the Board of Trade were united in a great and glorious work. The good that you have done, the homes that you have made happy, the joy and comfort that you have brought to many poor souls, the sunshine that you have made to shine in the homes of those poor mothers, and the little children that you have clothed and fed, I need not tell you of, but they are facts known to our Heavenly Father. (Applause.)

The toast, "Our Flag and Our Country," was eloquently responded to by Congressman Franklin Bartlett, who gave an interesting account of the origin and evolution of the Stars and Stripes.

"There are three things," he said, "which the flag should teach us, the protection of our citizens wherever they be found on the globe, the extension of our domain within due limits, and the crushing out of all and every sort of anarchy and socialism. (Applause.)"

Dr. John W. Brown made a speech fully worthy of his reputation in response to the toast: "The Base of Future Greatness. Education should be universal." His closing assertion that "no matter how grand may be the intellect that impresses itself upon humanity, unless its humanity is supported by the principles of divine love it is not educated," was hailed with loud and prolonged applause.

Hon. Judge Noah Davis, a foster-father of the Association, humorously responded to the toast, "The Gladsome Light of Jurisprudence," and Mr. Charles Stewart Smith, ex-president of the Chamber of Commerce, did full justice to the appropriate toast "Commercial Integrity—The Secret of Success." Referring to the jewelers' art he said:

There is no occupation more instructive than to contemplate the lives of men of the past, and the profession to which your Association belongs is one of the oldest and most interesting. The workers in silver and gold have been, perhaps, more closely connected with the art progress of the world than any other profession. Two or three thousand years before the Christian era men of your profession wrought wonderful things in silver and gold—things which have been models for our artists five thousand years later. There has always been an intimate connection between commercial success and the cultivation of art. The country most advanced in fine arts is also most advanced in useful arts."

In his admirable response to the toast "Woman," Mr. Louis E. Bomeisler took occasion to remark that "Columbus would never have

discovered America had it not been for Isabella and her jewels, a reason why every woman should have a full line of jewelry."

Frederick Taylor evoked continuous laughter and cheers during his humorous response to the toast "Our Friends." In the course of his remarks he said:

When I received the invitation I thought that as I was permitted last year to enjoy your so delightful hospitality, I was asked this year merely out of compliment. ("Nothing of the sort.") I thought I should decline the invitation, but when I recollected last year's jamboree and the awfully good dinner, when I remembered all the genial jewelry gentlemen whom it was my pleasure to meet, and their exceeding courtesy to me, which, as some of you will remember, was the presentation of a whole large cold bottle all for my own use, when it was my misfortune to be seated between two such absorbent parties as young Tiffany and old Dodd, (great laughter) I wanted so much to come that I didn't have the moral courage to say no. Of course you have all heard of that man who was invited to join in a midday snifter, but refused. They indignantly asked him if he had any reason for going back in that unfriendly way on a good ball, and he said he had two reasons. The first, "When my poor old mother lay on her death bed, she said, 'My boy I know your weakness; if you would promise never again to touch the nasty stuff I would die happy,' and I promised. 'But you said you had another reason.'" "Yes, he replied, 'the other reason is this—I've just had a drink and don't want another.'" (Great laughter.) As I made a speech at the last meeting I feel that I don't want to make another so soon after. But I came here expecting to see you jewelers depressed about the difficulties that had come upon your Fourteenth Street valuable customer. I spoke to Mr. Dodd about it, and he told me that while you don't expect a large demand in watches and diamonds, you do expect a large demand in chains and bracelets. (Great laughter.) When we were last here we were rejoicing in the manifestation of the people's power in the election of Judge Bartlett. Mr. Dodd tells me that since the last dinner Judge Bartlett has taken unto himself a wife, and the thought occurs to me that if the distinguished counsellor of the Jewelers' Association did the square thing in the jewelry line by the lovely bride, it he furnished her with jewelry gewgaws to a reasonable extent—it occurs to me that you jewelry gentlemen would get back from that poor judge in one fell swoop all the fees that he ever charged you for legal service. (Uproarious laughter.) To-night we are rejoicing in the still further manifestation of the people's power. It has demonstrated one thing to everybody's satisfaction, and that is the truth of that old song which begins—

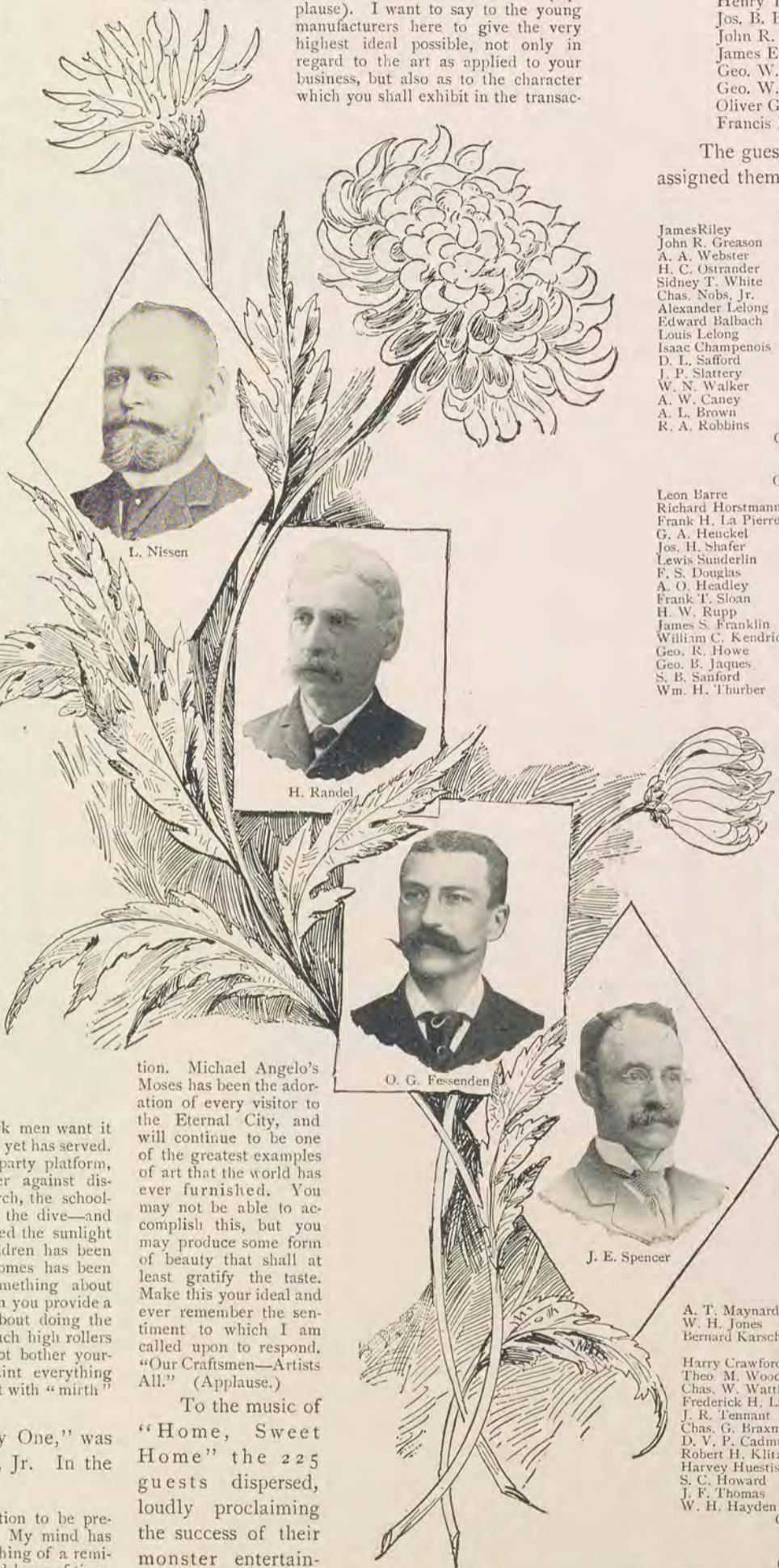
"Man wants but little here below,
But wants that little Strong."

(Laughter.) Not only that, but New York men want it for longer by one year than any other Mayor yet has served. The fight to elect him has not been upon a party platform, but upon the ten commandments—of order against disorder; of virtue against vice; of the church, the school-house and the home against the brothel and the dive—and because of the great triumph that we achieved the sunlight has been brighter, the laughter of our children has been more musical, and the inside of all our homes has been happier. (Applause.) My toast says something about being "sprightly and red with mirth." When you provide a lay-out like this you need never worry about doing the sprightly business under the leadership of such high rollers as Judge Davis. (Laughter.) You need not bother yourselves about "red" either. We will paint everything within reach vermilion, and we won't paint it with "mirth" either. (Laughter and applause.)

"Our Craftsmen—Artists Every One," was the toast assigned to David C. Dodd, Jr. In the course of his response he said:

I want to thank you for the kind invitation to be present on this your twentieth annual dinner. My mind has taken in the early part of the evening something of a reminiscence turn as I have contemplated the rapid lapse of time. I remember well the meeting of the committee which drafted your constitution, I could recall most of their names, and I remember the common sentiment which actuated all, to bring together into fraternal community the members of the jewelers' trade. Some of them have gone; it is unnecessary that I should recall their names, but those who have attended these gatherings for the last twenty years can testify that the organization has been fruitful in results, has accomplished much in cementing the bond of brotherhood which should bind all trades. We ought to be artists, some of us strive to be, and while I have listened with great

pleasure to the gentlemen here to-night, they know but little of the environment with which the jewelry art has to contend. What wonderful advances have been made in forty years! And to-day American jewelry stands among the very first in workmanship, style and finish. (Applause.) But I sometimes think that our jewelers have not begun to keep pace with the silversmith. It is true that they have a wider range for the display of artistic taste, and there is scarcely a royal family in Europe that does not contain a large representation of American-made silverware. (Applause.) I want to say to the young manufacturers here to give the very highest ideal possible, not only in regard to the art as applied to your business, but also as to the character which you shall exhibit in the transac-



tion. Michael Angelo's Moses has been the adoration of every visitor to the Eternal City, and will continue to be one of the greatest examples of art that the world has ever furnished. You may not be able to accomplish this, but you may produce some form of beauty that shall at least gratify the taste. Make this your ideal and ever remember the sentiment to which I am called upon to respond. "Our Craftsmen—Artists All." (Applause.)

To the music of "Home, Sweet Home" the 225 guests dispersed, loudly proclaiming the success of their monster entertainment.

The menu cards, which were the work of Tiffany & Co., were marvels of the stationer's art, and the guests could be provided with no prettier souvenir of this gorgeous banquet. The design and make-up were universally eulogized and pronounced well worthy of the world-famed house of Tiffany. We treasure our own as a prized souvenir.

Unstinted praise was given the efforts of the banquet committee, which exercised in the performance of its delicate duties, rare intelligence, proverbial good taste and excellent judgment. The committee consisted of the following gentlemen:

- Augustus K. Sloan, *ex officio*
- Ludwig Nissen, *ex officio*
- Henry Randel, *ex officio*
- Jos. B. Bowden
- John R. Keim
- James E. Spencer
- Geo. W. Shiebler
- Geo. W. Street
- Oliver G. Fessenden
- Francis H. Bawo

The guests and members, with the seats assigned them, were as follows:

- TABLE A**
John C. Mount
- | | |
|------------------|-------------------|
| James Riley | Wm. H. Hennegen |
| John R. Greason | Chas. H. O'Bryon |
| A. A. Webster | Chas. Diesinger |
| H. C. Ostrander | I. S. Lewis |
| Sidney T. White | Geo. Scherr |
| Chas. Nobs, Jr. | John F. Saunders |
| Alexander Lelong | Henry E. Ide |
| Edward Balbach | J. C. Grogan |
| Louis Lelong | Henry Tilden, Jr. |
| Isaac Champenois | |
| D. L. Safford | N. C. Downs |
| J. P. Slattery | G. A. Carter, Jr. |
| W. N. Walker | W. H. Wheeler |
| A. W. Caney | W. H. Porter |
| A. L. Brown | H. H. Butts |
| R. A. Robbins | F. E. Davis |
- O. G. Fessenden
- TABLE B**
Geo. W. Shiebler
- | | |
|---------------------|--------------------|
| Leon Barre | J. J. Freeman |
| Richard Horstmann | Henry G. Lambert |
| Frank H. La Pierre | Charles W. Byrnes |
| G. A. Henckel | Geo. W. Street |
| Jos. H. Shafer | H. Louis Street |
| Lewis Sunderlin | N. H. White |
| F. S. Douglas | F. W. Beinbauer |
| A. O. Headley | |
| Frank T. Sloan | Chas. W. Bailey |
| H. W. Rupp | C. E. Hastings |
| James S. Franklin | Cyrus Clark |
| William C. Kendrick | Wm. T. Carter |
| Geo. R. Howe | Jas. A. Punderford |
| Geo. B. Jaques | Gen. Geo. H. Ford |
| S. E. Sanford | Hon. David Dodd |
| Wm. H. Thurber | Robert C. Black |
- Aaron Carter
- TABLE C**
Jos. B. Bowden
- | | |
|-----------------|------------------|
| G. M. Hard | J. H. Johnston |
| R. S. Ferguson | H. P. Doremus |
| J. T. Perkins | H. T. Ketcham |
| E. M. Parker | W. H. Strawn |
| M. L. Bowden | W. C. Kimball |
| B. J. Schmauk | A. Johnston |
| C. Strobel | E. T. James |
| W. F. Ackerman | W. H. Kaye |
| John Linherr | Edward J. Spall |
| John R. Keim | W. M. Harker |
| F. B. Morse | Geo. E. Stevens |
| L. W. Ballou | C. B. Churchill |
| F. Keim | Edward Holbrook |
| | L. D. Cole |
| John S. Spencer | Watson A. Miller |
| G. S. Noyes | R. W. Ryer |
| | James E. Spencer |
- TABLE D**
Ludwig Nissen
- | | |
|--------------------|---------------------|
| Wm. A. Thompson | I. G. Dillon |
| I. A. Lewis | Thos. P. Smith |
| Emil Knopf | Wm. P. Williams |
| C. F. Pierce | Henry F. Quast |
| James A. Cheney | John W. Ruefer |
| Thos. E. Rice | Wm. N. Le Cato |
| P. L. V. Thierry | Geo. H. Robinson |
| S. Jaquette | Wm. B. Kerr |
| F. H. Eckfeldt | Clement Weaver |
| Wm. H. Long | J. Stuart MacDonald |
| | F. W. Lewis |
| | J. Dwight Ripley |
| | Geo. F. Kunz |
| Harrison B. Smith | H. H. Treadwell |
| Chas. Curie | Richard Butler |
| Francis H. Leggett | R. H. Galbreath |
| | Alfred H. Smith |
- TABLE E**
P. T. Tunison
- | | |
|---------------------|---------------------|
| A. T. Maynard | William H. Curtis |
| W. H. Jones | John W. Reddall |
| Bernard Karsch | Chas. R. Hansel |
| | John T. White |
| Harry Crawford | Herbert W. Richards |
| Theo. M. Woodland | John T. Howard |
| Chas. W. Wattles | Herbert Cockshaw |
| Frederick H. Larter | S. Cottle |
| J. R. Tennant | F. Walter Lawrence |
| Chas. G. Braxmar | Wm. Bryant |
| D. V. P. Cadmus | Elmer E. Wood |
| Robert H. Klitz | Geo. W. Hutchison |
| Harvey Huestis | Chas. F. Wood |
| S. C. Howard | Horace W. Steere |
| J. F. Thomas | |
| W. H. Hayden | R. Gray, Jr. |
- Geo. N. Wilcox
- TABLE F**
Geo. Kremenz
- | | |
|---------------------|---------------------|
| Robert Leding | James O. Bates |
| John N. Taylor | Walter R. Goodnow |
| Frank A. Lebkuecher | Thos. H. Kremenz |
| Frank Kremenz | Haverly B. Swart |
| F. H. Bawo | Emile J. Wittnauer |
| David Felner | Armin Fritze |
| W. S. Ginnel | A. Remick |
| Appleton Smith | A. Wittnauer |
| J. R. Gleason | C. G. Alford |
| Stephen Avery | Willis D. Upson |
| E. V. Clergue | |
| John L. Shepherd | W. S. Blackinton |
| L. J. Mulford | |
| William C. Rich | Louis A. Blackinton |
| James R. Armiger | Ferd. Volkmar |
| | Thomas Kirkpatrick |
- David C. Townsend

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WINDOW-DRESSING IDEAS FOR JEWELERS

Value of Window Displays.

This is the time of year when every properly constituted jeweler puts forth his best efforts to stimulate trade, and we feel we cannot urge too earnestly upon our retail subscribers the importance of brightening up and beautifying the interior of their stores, and particularly to the fact that it pays big to dress windows attractively. The subject of window display as a means of advertising has frequently been discussed, and the gradual evolution of ideas has brought about the practically unanimous opinion that effective window displays are one of the most powerful means of drawing trade to the retail dealer. This is especially true of the jeweler, for nearly everything he has in stock will add to his window attractions. With a view to aid the retail jeweler in making his holiday window displays as effective as possible, we have gathered from the best authorities on the subject, twenty-five up-to-date ideas which are practical and thoroughly suggestive. They are well worth the perusal of the whole family of KEYSTONE readers, and the younger members of this large and interesting family will find them most helpful in their work. Here they are:

The only way to become a good window-dresser is to dress windows.

Variety is the spice of life—variety is also the spice of window-dressing. Keep things changing. Never let an opportunity slip to show something new and striking.

The newer the window the more easily it can be dressed, as a rule. An old, dingy window can never be made to appear first-class.

The window-dresser should know three things thoroughly—his stock, his customers and his window. If he does not know the first two he does not know what to show, and if he does not know the last he does not know how to show it.

A great step towards dressing a window well is to have it first thoroughly undressed. Clean your windows well before you begin. Get every obstruction out of the way. Then get your goods together and the work of making the display will be short and pleasant.

One of the great faults of the beginner is in making his displays too flat. There should be variation. A perfectly level road is the most tiresome to the traveler.

The idea of getting something for nothing is not a healthy one to cultivate. But window-dressing is a means of advertising where the cost is reduced to a minimum, and, if properly done, the returns are great.

Overcrowding of goods in the show-windows should be avoided. Always use as few goods as possible. A few goods tastefully arranged are more effective and pleasing to the eye than a great quantity of goods crowded together.

In all kinds of window-trimming, special attention should be paid to the minor details. Where this is done the more prominent parts are sure to come out correctly.

If you put "bargain" cards on your regular goods, what will people think of your regular prices? Moral—don't advertise bargains unless you have them.

Your displays should be teachers of fashion and inviters of trade.

Don't say: "Oh, well, that window will do for a while. I won't bother about changing it now." When you first realize that a change is needed, then is the time to make it.

Many times a person sees a thing in a window, admires it, desires it, looks for the price, finds it not, and goes away.

The window-dresser should not be above attending to trifles. Perfection itself is no trifle, but trifles, taken together, go a long way towards making perfection.

You should know just about what you are going to do before you begin to trim your window. It is a loss of time and money to stop and study and change your plans after you have once begun.

Dirty glass, soiled cards or tickets, unclean fixtures and all such things are a menace to your reputation as an artist and to the business of your house. See that everything is kept in order and the trade will come to you unconsciously.

One thing you should keep in mind always: What you show in your windows is not to be looked at alone; it is for sale. Window-dressing has for its object the bringing of business.

Make your windows look different from week to week. If they always look the same, the monotony will become very tiresome.

The changing seasons bring novelties in goods. It is for the window-dresser to effect corresponding novelties in his methods of display. The aim should ever be novelty. It is the fresh thing that attracts attention. And when you get the attention, business follows.

"Let all who aspire to be window-dressers remember that the *raison d'être* of their occupation, as such, is to display goods in such a manner as will insure their more speedy sale, and not merely to make the window look pretty, far less to make it a place for the disposal of a stock with the idea of clearing counters, etc. It may be very flattering to hear it said, 'What a very pretty window,' but if these remarks are not accompanied by an increase in the weekly return, it is labor in vain."

Never let people think it is too much trouble to get an article out of the window, but, on the other hand, avoid disarrangement as far as possible.

"The card in a show-window seems an insignificant part of a very necessary adjunct to every up-to-date shop," says a competent writer on window-dressing in the *Cloak Review*, "but it is, in truth, the finishing touch without which no window-display is complete, if the intentions of the proprietor are to utilize his windows as a means of attracting trade into his store. I believe the first step toward correct card construction, to be the employment of as few words as possible—short, sharp and to the point. This method inspires confidence, because it smacks of the truth. The passing throngs have no time to read lengthy announcements or solve problems or illustrated rebuses."

Keep the window and store always lighted well. Dark stores give a bad impression.

After you have gone to the trouble of fixing up a good window display, it pays to have the public see it. Advertise the fact; connect your window with your advertising, and strengthen them both.

Window-Dressing Among Jewelers.

The average jewelry store, as we have heard it remarked frequently, has not heretofore been made as attractive at the holiday season, or at any other season for that matter, as it might be. This is especially true of the front windows. With a little trouble, and at slight expense, the windows most prominent and facing on the street might be lowered or made broader and then filled with attractive articles.

If the jeweler himself thinks he does not possess the requisite time and taste for such an arrangement, let him call in the aid of his feminine friends. He will find it to be one of the best advertisements he could devise. If he has a wife who is properly interested, she will take pride and pleasure in trying her skill at it, or if he has a young daughter she will think it "great fun" to dress up father's window.

Our jeweler friends would find that a woman's taste would suggest changes from time to time, and the surrounding inhabitants would gradually come to watch for these changes. Then seeing something especially alluring, they would go inside to examine it more closely and ask the price.

If in a village or small city, the young girls naturally say to each other, "Let's go and see what Mr. Jeweler Blank has new and pretty in his windows." Seeing some article that was especially attractive, they would go inside to give it a closer inspection and ascertain the price. They would come again, and yet again, and finally *pater familias* would yield to their entreaties for that "lovely" watch, or ring, or whatever the much-coveted article might be.

By all means, Mr. Jeweler, dress up your windows even though you are "only a country dealer." It will pay.

* * *

Unique Santa Claus Window.

A window depicting the northern home of Santa Claus might be a good idea for jewelers to work into a Christmas window. It would be inexpensive and within the reach of almost any one. If you can secure an aurora borealis scene for the background, well and good; if not, let it alone. At the right hand side you want to have a cave. The framework of the cave should be laths covered with cotton, sprinkled with diamond dust. The cotton should be arranged irregularly so as to produce the right effect. Inside the cave, into which one can see from the window, have cotton hanging from the ceiling in the form of stalactites or icicles and massed against the wall in fantastic shapes. The cave should be large enough to admit of quite a display, and give room for a small boy dressed as Santa Claus.

Outside the cave, on the base of the window, have a ship made of goods in a sea of water and ice, the water made of green cloth propped into billows by means of boxes, etc., and the ice composed of cotton thrown on the cloth. It would only add a pleasing incongruity to the scene to have holiday novelties, plainly marked, resting on some of the ice cakes. If you can have the ship on rockers and kept in motion by a boy behind the scene, all the better. In that case your cloth should be attached to the sides of the ship, so that

Window=Dressing Ideas for Jewelers.

(Continued from page 935.)

the ice and water can be agitated by the same motor. At the left of the window, rather back of the cave, build a light-house of laths covered with cloth. It would also be a good idea to have a crevice in the side of the cave towards the ship, so that Santa Claus may look out occasionally and see how things are going on.

★ ★ ★

"Be Original and Therefore Successful."

Says a well-known Chicago window-dresser: "There are no set rules for the trimming of windows. All the published manuals and treatises on window-trimming will never make a successful window-trimmer. They may elucidate or help over some difficulty in connection with a display, but to follow out these hard and fast rules as usually laid down in these treatises on window-trimming is certainly a great hindrance to a trimmer who aspires to be original and successful. I have noticed in published interviews with trimmers at various times, the fact that some of them lay down theories (or rules) for the special treatment of certain kinds of goods and make the assertion that any other way is wrong. This kind of assertion smacks too much of egotism, and my idea is that there may be a thousand and one ways of treating the same kind of goods, and every one of them be correct. The successful painters, authors, poets, actors, etc., never became successful by following any hard-and-fast rule as laid down in the various guides of their respective profession; but they did become successful by kicking over the traces of hard-and-fast rules and making new ideas, new rules, new conceptions and new anything and everything, so as to be original and in that way become successful."

★ ★ ★

Look Ahead in Windows.

The wide-awake window-dresser will not be caught fast asleep by Papa Time on his rounds. Don't wait till the occasion comes before you tackle it. Keep a fortnight or, better, a month ahead of the time. Study the almanac and make your plans well in advance. While the crowds are admiring that Christmas window, be getting up your scheme for Washington's Birthday or even Easter. The forehanded people get along in this world much better than simply the ordinary two-handed, especially if one of these is a little behind hand.

★ ★ ★

Mirror Background.

The mirror background for all kinds of displays, and especially for fashionable ones, is becoming almost universal. Jewelers will find them great helps. It serves more than one purpose. It increases the size of the display apparently, makes it possible to see both sides of the same article, and at the same time gives the observer an opportunity to see how his or her own toilet is arrayed. Says a practical window-dresser on the subject: "I have noticed that a mirror makes the best background for a display window. It ought to be of superior quality and of as attractive design as possible. Whether it is vanity, or merely the laudable desire to ascertain if one's appearance is presentable, there seems an almost insurmountable impulse in every human being to gaze on the reflection of his or her features in a mirror whenever that useful article is encountered. This is

especially a weakness, if such it be, of the fair sex, and as their custom is very desirable, the wise retailer will endeavor to draw their attention to his stock by the method suggested."

★ ★ ★

Where Display Windows Excel.

"Among American cities, Brooklyn's windows are unequaled, except, perhaps, by those of Philadelphia and Chicago," remarks a clever window artist. "It is a well-known fact that they are superior to those of her sister city across the river. Credit for this is due in two directions—to the decorators themselves, of course, and to the proprietors of the large dry goods houses, who regard their windows as one of their best advertisements and spare no expense to make them effective. They supply with a liberal hand the costly accessories of window trimming, and by paying large salaries have brought to Brooklyn some of the best decorators in the world."

"Yes, my name's written there on the page white and fair, and I don't want it scratched off The Keystone list."
—M. L. Kreamer, jeweler, West Union, Iowa.

San Francisco Letter.

Owing to the recent election, business for the past few weeks has given away to the temporary excitement, but is now beginning to pick up again. The travelers, who are nearly all out, send in favorable reports, and a brisk trade is looked for from the present time until the holidays.

The "Brownie" craze has struck the coast like a cyclone. Every jeweler now has a large stock of these well-selling novelties.

The rumor that Armer & Weinshenk had dissolved partnership was a mistake. The facts of the case are as follows: Max Armer, father of Abe Armer, who was a special partner for a short period, retired the early part of last year, and the firm continues as formerly, consisting of Abe Armer and Charles Weinshenk.

W. Warren, formerly with Cummings' Sons, of this city, has accepted a position with Stanley Glidden, of Sacramento.

Among the jewelers in town recently were Bailey Bros., Pomona, Cal.; E. I. McManus, San Louis Obispo, Cal.; E. Maybem, Chico, Cal.

J. Beatty, formerly with Wm. Manning, of this city, has gone with George W. Shreve.

Samuel L. Moore, the popular jeweler of Ukiah, Cal., has been in town, purchasing goods for Christmas trade.

M. H. Brun, the popular partner of M. Wunsch & Co., has just returned from a very successful trip, and reports a much better feeling throughout the country than has been noted for some time past.

A. C. Corwin, the well-known jeweler of Stockton, Cal., has been buying a large stock of watches and jewelry to supply his store for the holidays.

R. Allen, the well-known and popular representative on the road for Levison Bros' silverware department, is out again and sending in a number of orders.

G. E. Pruner, formerly of Riddle, Ore., is about to open a jewelry store at Escondido, Cal.

Max Salzman, formerly of Gervais, Ore., has sold out his business to his brother, H. Salzman, and is expecting to open a store in southern California before long.

George H. Doerr, the prominent jeweler of Spokane, Wash., came to the city single but returned double—in other words he carried home a fair maiden from Oakland.

J. Kocher, of R. Kocher & Son, of San Jose, is in town, buying goods.

The firm of Mill & Stark have opened a very attractive jewelry store in Albany, Ore.

J. L. Solomon, known as the Lombard Loan Office, made an assignment a few days ago. His liabilities are said to be in the neighborhood of \$75,000. Most of his creditors are Eastern houses.

Carl King, of Rocklin, Cal., can be numbered among the large buyers in town this month.

T. Hansen, brother of A. Hansen, of Seattle, the largest jeweler in the Northwest, is opening a store in Portland, Ore.

M. A. Judis is on the road with a large and well-assorted line, and from latest reports was doing a brisk business.

Massachusetts Falls into Line.

The Retail Jewelers' Association of Massachusetts was organized during the past month, and as all present at the initial meeting favored affiliation with the National organization, the latter body will be materially strengthened by a new and sturdy ally. No less than eleven State Associations are now unified in the National body, which thus speaks with a commanding voice to those who might be disposed to pay but little attention to individual jewelers or even individual State Associations.

The organization was effected in Worcester, on November 14th, by Mr. Arthur S. Goodman, the energetic president of the National Retail Jewelers' and Pennsylvania Retail Jewelers' Associations. The meeting was held in the Board of Trade rooms, and the following Massachusetts jewelers were present:

Charles M. McFarland, Bruce & Chapin, Herman Lucke, Nelson H. Davis, J. P. Weixler, all of Worcester; R. C. Eldridge, Edward F. Lilley and Charles W. Wilcox, of Milford; F. E. Ladd, Eldredge & Penny, M. F. Robinson & Son, F. A. Hubbard, of Springfield; W. W. Newcomb, of Fitchburg; H. A. Hewey, of Winchendon; Joseph F. Bartlett, L. T. Wilner and G. S. Strout, of Clinton; G. O. Foye & Son, of Athol; J. A. King, of Southbridge; Katelle & Son, of Boston; J. H. Conner, of Lynn; J. J. Frigault, of New Bedford; C. P. Forbes, of Greenfield; O. L. Brown & Co., of Hopkinton; S. J. Howell, of Orange; G. M. Tewksbury, of Westboro; F. W. Barnes, of Uxbridge; W. W. McAllister, of Whitinsville; G. W. Sayer, of Spencer, and T. E. Dickinson, of North Adams; Monroe, Carter & Co., Southbridge; J. W. McVine, West Gardner; C. W. Bergman, Webster; G. A. Bailey, West Brookfield; Frank Knowlton, England & Leavitt, M. F. Tolman, of Worcester; Chas. Webber, Fitchburg; E. A. Chandler, West Gardner.

Mr. Goodman called the meeting to order, and expatiated at length on the proverbial benefits and potentiality of organization. He specified in detail the advantages of a State Association of retail jewelers, and pointed out the manifest advisability of such an Association affiliating with the National body. If a State Association be beneficial, he argued, how much more beneficial and powerful would be a National organization. The grievances of jewelers he recounted in detail, and argued convincingly that organization alone furnished the remedy.

After Mr. Goodman's forcible address it was resolved to organize forthwith, and a new and very promising Association was auspiciously launched on its career of usefulness. That the membership will rapidly increase was evidenced by the fact that a number of letters were read from absent jewelers, expressing their willingness to join a State Association, if such were formed. In fact, all seemed to enter into the spirit of the thing with enthusiasm, and it seems certain that the infant organization will give a speedy and brilliant account of itself.

Officers were elected as follows: President, R. E. Eldridge, of Milford; vice-president, F. F. Ladd, of Springfield; secretary and treasurer, W. W. Newcomb, of Fitchburg. President Eldridge was authorized to appoint five directors, who, with the three officers, will constitute the directorate.

The next meeting will be held at Worcester, on January 3d, and in the meantime the organization will be perfected, and circulars will be sent to all the retail jewelers in the State.

Massachusetts boasts of an exceptionally prosperous and enterprising body of retail jewelers, and the National organization will appreciate at its proper value the material strength given it by its youngest member. The State was the first to pass a law prohibiting the false stamping of silver—a very worthy law which should have a place on the statute books of the realm.

We are Making Business

By Pushing Business

Our Salesman

shines forth in all its glory with every facility for all sorts of wants for the jewelry trade during the Christmas season, or any other season for that matter. It is the book for you to buy by—it is the book for you to sell by. It is always ready to supply your demands for everything needed in your jewelry store at bargain prices that will go down into history as the greatest values of the season. Every department of

Our Salesman's

headquarters is marching under the banner of low prices and great values, and that's what is making things hum with us. Send us your orders this month for prompt service and bottom prices.

F. M. Sproehnle & Co.

Plucky and Pushing.

Chicago.

Progressive and Popular.

Publishers of **Our Salesman**

Send and get our Catalogue. It will pay your rent.

Leave it open on your show case—inquisitive people will turn its leaves and buy.
Our firm name does not appear in it.



OUR LEADERS
 The
New Columbus Watches
 16 and 18 Size, 21 Jewel
RUBY AND TIME KING

are the finest and most accurate watches now produced, and are especially adapted for a fine Holiday Present. Ask your Jobber for sample order. We warrant these goods in every particular.

NEW COLUMBUS WATCH CO
COLUMBUS, OHIO





It seems the agitation for foreign trade has awakened a strong interest among the manufacturers. A call was made by them some days ago for the manufacturers of the entire United States to meet in convention in this city, January 22, 1895. The responses have been almost unanimous. Every commercial body and every board of trade is to be advised of it, so that the largest possible attendance may be had. Present advices indicate that this convention will represent more men, more money, and more ingenious intelligence than any ever held in America. Nearly 3,000 manufacturers have pledged themselves, representing about a million skilled workmen and unlimited capital. The Cincinnati Board of Trade will take the matter up, and push forward some of the details of the project. Wm. S. P. Oskamp, of Oskamp, Nolting & Co., is a member of this Board, and will largely influence the jewelry interests in Pan-American trade.

The trade throughout the country is still quiet. The jobbers are selling goods, but not as many as they should at this time. The retailer is holding off until he himself sees some enlivening. The last two weeks will then be a time of rush. This will not prove satisfactory to either jobber or dealer, as the profits of two weeks will not compensate the former for a whole season, while the dealer will not receive the choicest goods, as they will have been picked over, and he will be obliged to take what he can get at the eleventh hour. The trade are advised to make their selections now while goods are fresh.

The jewelry houses of Cincinnati are noted alike for the completeness of their stocks and their elegant displays. Duhme and Hellebush are keeping up their reputation in this regard, while Oskamp, Nolting & Co., having advantage of three times the window-space, spring new ideas continually and keep a throng around their corner. A. G. Schwab & Bro., also on Fountain Square, have really the neatest windows. They are never over full, just a few of the gems they have become so renowned for. Recently they had the same pretty black background, and used the long delicate gold guard-chains as dividing lines diagonally between watches and fine mounted stones. D. Schroder & Co. have a massive window, which they are dressing this season in garnet plush, filled with choice articles in jewelry and bric-a-brac.

There are no houses busier than E. & J. Swigart, the well-known jobbers and importers of jewelers' tools, materials, etc. They have never enjoyed such a prolific season. Their side lines—boxes, trays and optical goods—have all been increasing beyond their expectations. Having entered this field with such a variety, and an immense stock to meet the demand, it was not surprising that the trade soon found out where to get bargains. Busy employees on the three floors have kept things moving the past month. On the second floor some twenty salesmen may be found, and they are never idle a single moment, and the shipping clerks have worked every night getting off the numerous orders. Messrs. Eugene Swigart, Solar and John Francis are all on the road, contributing their share of the great business that has come to this house during the past month.

Among the manufacturers Homan & Co., silver-plate makers, are the very busiest. They, too, have been working at nights. But it is a fact no longer doubted that they are turning out goods wanted by everybody. Already the Eastern competitors realize that something really desirable can come from the West, and now they can come out of their incrustated conceit and "hustle," for if they do not, the West will run away with their plum-pudding. It is fast making inroads, and if it keeps on the largest share will be gobbled up. It is a Western habit to never let go, and now that the Homan silver plate people have really become a formidable competitor they intend to keep up their reputation, and will go it one better next year. They have everything in their favor; location, money, enterprise and young blood to push it, and they are there to stay.

D. Schroder & Co. are a constantly increasing firm. They are numbered among the large houses of Cincinnati, and are considered liberal buyers and keep a complete line of everything in the jewelry and kindred lines that is on the market. Their salesmen are popular on the road, so there has been no reason for this firm to complain. When Aaron Hermann meets you he has always a smile ready made, and it is contagious, you cannot resist him. His cus-

tomers know when he comes in that he will sell them goods, no matter whether they want them or not. There is so much in personality. Isa Schroder is just one of the nicest boys on the road. At least all the girls think so, and so must the trade, for he is sending in some excellent orders.

Bene, Lindenberg & Co. are another popular firm. Both heads of this house have a large personal trade, the former in the South and the latter in the West. While conservative jobbers, they have had a wonderful growth, and their balance sheet is always on the right side.

Oskamp, Nolting & Co. are perhaps the largest jobbers in foreign markets. Their Spanish mail is growing to splendid proportions. They keep a Spanish interpreter daily occupied for this work. Homan & Co., also the Swigart Bros., have a large Spanish trade, and when this new project for South American trade is opened up, these houses will be in the swim to great advantage.

A. G. Schwab & Bro. are making a specialty this season of diamond goods and the finer stones in the fancy line, in which they have had excellent sales. A. G. Schwab makes frequent personal trips of much profit.

Jos. Noterman & Co., the veteran jeweler, still leads in the manufacturing line, and no salesmen are better equipped this season than William Pflueger and John Ostheff. Joseph Goesling, junior member of the firm, is still in Colorado, where he went for his health six weeks ago.

The Herman Keck Manufacturing Co. have ready their large and elaborately illustrated diamond catalogue, which is a beauty. It is probably the finest ever issued in this section, is in colors, and shows up the gems magnificently. Send for it if you do not receive a copy. This house is turning out some very fine pearl pendants. Herman Keck is now in New York, selecting pearls for a diamond and pearl necklace to cost \$6,000, a recent order.

Gustave Fox & Co. have removed to 20 West Fourth Street, which they have fitted up in elegant style. They will not remove their factory until spring, when they will have all in the same building. Their diamond and Elk catalogues have been much in demand this fall.

The Fox Bros. intend opening up a diamond-cutting establishment. Sol. Fox is now in New York, making arrangements.

Jonas, Dorst & Co. are busy on a large number of school medals and class pins. They retain their wonted reputation for turning out first-class designs. L. J. Strang is on the road with a large line of novelties and fine jewelry.

Louis Albert, of Albert Bros., is on the road and reports fine trade. Their new line in silver novelties has been quite a paying feature with them. Their clock sales this season are unprecedented.

William Bagley, of Chicago, was arrested in Cincinnati, recently, by a Chicago detective, who followed him to this city. He is wanted on a charge of larceny. He has been employed by Hyman, Berg & Co. He successfully solicited about forty watches and a quantity of jewelry for repairs and skipped out. Nothing of value was found on him. The detective is now searching for his room or companions.

Frohman, Wise & Newman are enjoying the fruits of persevering salesmen. Both Mr. Wise and Mr. Newman are out on personal trips and have been very successful. Sigmund Strauss is also a popular salesman with good results.

"Please excuse bad writing, as I got nervous when I thought of missing The Keystone. I enclose one dollar."
—M. Green, jeweler, Pearl River, Louisiana.

Don't Snub.

Don't snub a boy because of physical disability. Milton was blind, and also was deaf.

Don't snub a boy because he chooses a humble trade. The author of "Pilgrim's Progress" was a tinker.

Don't snub a boy because he stutters. Demosthenes, the greatest orator of Greece, overcame a harsh and stammering voice.

Don't snub a boy because of the ignorance of his parents. Shakespeare, the world's poet, was the son of a man who was unable to write his own name.

Don't snub a boy who seems dull or stupid. Hogarth, the celebrated painter and engraver, was slow at learning, and did not develop as soon as most boys.

Don't snub a boy because he wears shabby clothes. When Edison, the great inventor, first entered Boston, he wore a pair of yellow linen breeches in the depth of winter.

Don't snub any one, not alone because they may far outstrip you in the race of life, but because it is neither kind, nor right, nor Christian. —Exchange.

Points About Traveling Men.

(Continued from page 929.)

Tom J. Huteson, representing the Julius King Optical Company in the West and South, is one of the best-known and successful optical salesmen visiting this section, and it is safe to say he secures his share of trade in all the leading towns in his territory. THE KEYSTONE takes pleasure in presenting his photo. herewith. Mr. Huteson was born twenty-seven years ago in "merrie"



T. J. Huteson.

old England, and came to America about ten years ago to engage in the cattle-raising industry on the plains of Nebraska. He was accompanied by his two brothers. They settled on a ranch in the beautiful Platte Valley, near Central City. Tom soon tired of ranch life, and sought and obtained a position as traveling salesman for M. Zineman & Bro., of Philadelphia. His next engagement was with the Spencer Optical Manufacturing Company, New York, where he remained about two years, making a record of sales that has made him famous as a road salesman. In January, '92, he made another change, going with the Julius King Company, his present employers, to cover the Western territory. Personally, Mr. Huteson is a man of striking appearance, rather tall, with deep-set dark eyes, black hair, white, regular teeth and pleasing countenance. He is wide-awake and bright. His generous and social traits make him friends wherever he is known. His pluck, perseverance and energy are indomitable.

C. H. Pixley, traveler for F. A. Hardy & Co., Chicago, is an inventive genius of no mean pretensions. His lens-measure, now being put on the market by his firm, is accurate, practical and popular in price, and is bound to be in good demand.

J. T. Thornton, West and Northwest representative of J. T. Scott & Co., of New York, better known as "The Reverend" or "Jack," was an interesting caller at the Western headquarters of THE KEYSTONE last month. It is pleasing to note that "Jack," though one of those quiet men, with mild blue eyes, somehow always manages to land on both feet while the other fellows are teetering on one leg.

Geo. N. Rouse, Southern traveler for the Geneva Optical Company, is rounding up a most successful season this month, and is expected in Chicago about December 15th.

Louis Berger, representing H. B. Peters & Co., New York, is hustling for business through Massachusetts and New Hampshire, and reports a good trade in the material line.

Among the hustling travelers on the coast, Fred. Davis, representing Nordman Bros., can be ranked among the foremost for his perseverance and ability as a traveling salesman. He is an Englishman by birth, having been born in Liverpool, October 19, 1866, at which place he remained during his early years. At the age of fifteen he left England and came to San Francisco, which at that time was still enjoying its bonanza days. He gradually worked his way up in the watch material business until he was a partner of the concern of Jones & Davis. He afterwards sold out his share of the business and accepted an offer from Nordman Bros. to represent them on the road. Mr. Davis is well known among the trade, and is always sure of a warm reception when hustling for orders. He is a domestic man, having married a San Francisco lady in 1890.

"O size" A. T. Lowenthal, while one of the smallest travelers on the Pacific coast in stature, is one of the largest hustlers in the trade. He was born in Syracuse, N. Y., June 20, 1856, and obtained his school education at that place. At the early age of fifteen he started to learn the engraving trade with Geo. W. Wood, and from that time followed the jewelry business in one branch or another. He came to the land of sunshine, fruit and flowers in 1884, accepting a position with Nordman Bros., of San Francisco. Later he became "knight of the grip" for A. Eisenberg, one of the most progressive firms, and is to-day the hustler for that house. He married Miss Bessie M. Lowe, of Syracuse, in 1890, and makes his home in the city of the Golden West, San Francisco. He is well liked among the trade and is a sample of the bright, up-to-date traveler.

L. S. Jones, representing H. B. Peters & Co., New York, is out on the road through New Jersey and eastern New York, in the interests of his house.

Timely Topics Tentatively Touched.

BY JOHN TWEEZER.

Five hundred retail grocers recently met in New York to discuss the encroachment of the big department stores upon the grocery business. It was shown that these great bazaars have laid in tremendous stocks of groceries, buying quantities which insured the lowest possible trade prices, and offering the staple articles at net cost, or even less, in order to induce trade to this department, and thus provide a new "feeder" for the general business of the store; that the public was tumbling over itself to purchase groceries at less than the small grocer could buy the same goods; that the flaring advertisement of the department store was turning housekeepers' heads, and like Othello's, the grocer's "occupation is gone," in that particular bailiwick; and there is weeping and wailing and gnashing of teeth.

It is the echo of a hundred similar grievances from a hundred other suffering businesses; and the remedies proposed vary from the whine of childish helplessness to the radical suggestion of the broad-gauge merchant. It was suggested that the united grocers boycott the department stores—thus swishing with that dangerous, two-edged sword, which is more likely to cut the swordsman than the victim, since it would attract to the big store that element of popular sympathy which they are at present without, and advertising them more effectively than their own spread ads. in the press could hope to accomplish. It was suggested to boycott the manufacturers which furnish "proprietary" articles direct to those bazaars—which was a long step nearer the solution of the problem. It was proposed that a law be enacted whereby a merchant would be compelled to sell *all* his stock of any "proprietary" article to the manufacturer thereof, at the price advertised, when that price was cost or below. And so on, through the whole range of suggestion, from rank absurdities to ingenious and wise provisions.

One aggressive and prosperous young grocer, who refused to attend the meeting, contented himself with a pithy letter to a leading New York newspaper, which said, in substance: Attend to your business in a business way, and don't whine when cleverer merchants do clever things. Increase your trade as the department stores increase theirs—by courageous advertising *that advertises*. A rival can ruin no merchant who deserves to prosper; but "desert" must not be defined narrowly, in trade. It is only the fit that survive.

Unhappy, indeed, is the lot of the small merchant of mediocre ability, in the line of groceries, or dry goods, or boots and shoes, or notions, or any of the lines which do not involve technical skill or special education, in the great cities where in the department store dominates more and more in the realm of trade! The jeweler, by reason of the previous special training which inspires a unique confidence in the public mind as to his special fitness for purveyance of the lines he handles, has not suffered as severely as merchants in other lines from this competition of the gigantic bazaar. It is an undeniable fact, admitted by department store managers themselves, that their sales of watches, jewelry and the like are not in proportion to the sales in other lines which help to make up the aggregate of their business. But the entering wedge has been driven; the genius which has built up these congregations of various businesses under one roof will, in time, find a way to win the public in increasing number to the jewelry counter of the big store; and it behooves every

jeweler who would survive that onslaught to secure the public confidence and anchor himself in the public favor while he may. The day is past for antiquated ideas and worn-out methods. The slow observer who adheres to conventional ruts, must eventually drop out of the race. The broad view, the quick apprehension, the liberal thinking and active doing, the expansion of lines, the virile advertising, the aggressive and forceful, rather than the timid and conservative spirit, is called upon in these days of fierce competition as never before. It is the day of progress, and woe to the jeweler who does not look unwinkingly ahead!

"JOHN HAMSTIRE'S little daughter, Becky, swallowed her mother's tiny chatelaine watch while at play, a week ago last Tuesday. Up to to-day the watch has not been recovered, but the little girl appears to suffer no inconvenience whatever." (*Local Paper.*)

Which fact invites a suggestion. In view of the assurance recently delivered by a French savant that by the end of the next century nutrition will be scientifically adjusted to each individual need, foods will be supplied in highly concentrated form (a pill containing all the essence of a four-pound beefsteak, and a teaspoonful of fluid all the "enthusiasm" now provided in a whole case of champagne), and eating will be as quick and as mechanical a function as sharpening one's pencil, why shouldn't an ingenious watchmaker provide a tiny, swallowable Digestive Alarm Watch, which would be chemically adjusted so as to be sensitive to the stomachic acids and "go off" whenever nature demanded nourishment? A finger put into the vest-pocket would draw forth the pantry; a pill from the solid silver kitchen, therein carried, would provide the abundant dinner—and one is fed, even while quoting a price to the customer across the counter! Some provision would have to be made for winding—probably the old-fashioned druggist's instructions, "When taken to be well shaken," would answer; and some thought must be given to the question of anchoring the watch to the stomach; but everything is possible to American ingenuity. We wait the advent of the Digestive Alarm Watch.

It is easier for a camel to climb on the knee of an idol than for a poor merchant to enter the kingdom of riches without advertising.

DRESS your window occasionally to epitomize the current news. Nothing is more "fetching" than these timely observances, and they always inspire a *real* confidence in the "get-upfulness" of the merchant. I make a suggestion in merest outline:

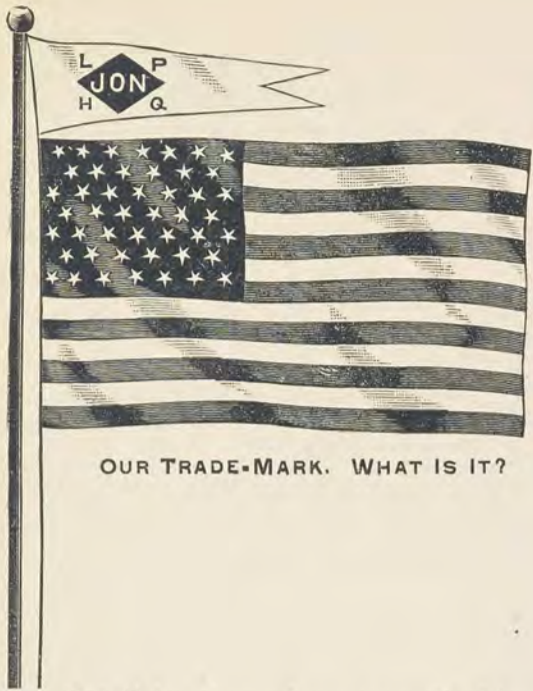
The Japan-China war is now "on." A small, well-selected line of oriental curios is perfectly safe stock at this time of year, and does not require a large investment. Get enough to make a window display. Dress the window in inexpensive Chinese and Japanese silks, rice paper, beaded work, fans, tiny lanterns, etc. For four or five dollars you can get a Japanese rug to cover the floor of the window, and use it afterward in your house. On the center of this rug lay two crossed swords, one Chinese, the other Japanese. From the point of contact of these swords, and extending from the angles thus formed to the corners of the window, put small Japanese articles on one side, Chinese products on the other. Between the hilts of the swords stand the lid of a tea-box, on which have a card inscribed, "The War (of prices) between China and Japan. Step inside for particulars of the progress of the

battle." Between the points of the swords lay a Japanese caricature-mask.

If all the Good Resolutions which are now in conception, and which will be born on January First, could only survive the perils of the swaddling-clothes period, and come luckily through the tooth-cutting time, and escape the measles malady, what a fine suggestion of the millenium this wicked world would present! I question whether even that young earth in which the apostles roamed had quite as earnest a quality of goodness in it as this old earth could exhibit, by noon of its first day in 1895—in its *mind*! Yet who has the hardness of heart to discourage the amiable human habit of "resolving," on New Year's Day? Who is so vindictively cynical as to point out the pretentious promising shadowed so closely by the pitiful performing? Who dares to say that humanity is universally hypocritical? No; whatever the falling-off from the high resolve, through the slow months that daily stretch more taut the tie that binds us to our January promises, we are all better for the *attempt* to do better, to think more charitably, and act more nobly; and the dear old foolish world is healthier in every way for its annual moral refreshment of "resolving."

As I write this, in the waning November days, the inspiring glow of Christmastide begins to warm the pulse of trade, and melt the icy barriers around the human heart as well. With each added twelve-month to my piled-up score of years the marvel grows upon me more and more that the great Christian festival should hold its undisputed sway over the instincts and the souls of men after all the eighteen hundred and ninety-three anniversaries of its original celebration. Surely there must be something more than the accident of habit which gives it this perennial luster of renewal. Surely the fact is eloquent beyond any spoken words of the mighty mystery of that birth in Bethlehem, of the actualities in the scheme of human salvation, of the existence of other forces than are comprehended in our finite intelligences. However skeptically the crushed spirit may lament, in the days of dire gloom throughout the year, there is no room for doubt in the presence of Christmas. It calls to us with trumpet-tongue to *believe*. It fills the whole atmosphere with the blessed light which radiated from the manger in Judea. And in a significant way does the inspiration of the Christmas festival find tongue in human activities—to wit, in the practical charities which carry "good-will to men." I like to think, moreover, that the greatest beneficence of the Christmas spirit is not in the actual parcelling out of our stores for the poor and needy; not in giving the dinner here and the dollar there; but in the inspiration which *gives the impulse* to this right doing, which enables us to turn our eyes away from ourselves, which opens our hearts to the exercise of unselfishness, gentleness and meekness. Even as a human institution, the selection of one day out of the three hundred and sixty-five for a practical exemplification of the truth that "it is more blessed to give than to receive" would be a wise economy. It conserves the moral strength and vigor of the race. Call it sentiment if you will, unbeliever and skeptic; then it is sentiment that is surcharged with good, and the world will remain young and fresh and fair to look upon only so long as this divine sentiment of goodwill obtains among humanity, and the brotherhood of man is thus reflected from the fatherhood of God! J. T.

Page 2, Marquardt's Catalogue



Here are our Business Methods.

— Spend a Moment and Read Them.



Retail Jeweler: I am a practical jeweler and about to put in a stock of jewelry. What inducements can you offer me?

Answer: Several very important inducements, sir:

FIRST, we can and will save you money.

SECOND, our varied stock of high-grade jewelry to select from, every piece of which we can warrant to give satisfaction.

THIRD, the advantage of dealing with a house whose entire stock is marked at the very lowest prices. No baits to deceive you; no, not one. All prices low and in plain figures.

Retail Jeweler: How is it you can sell so much cheaper than your competitors?

Answer: Easily answered, sir.

FIRST, we are satisfied with a very low margin of profit.

SECOND, we collect our bills when due, thereby turning our money often.

THIRDLY, we give you the thousands of dollars that other houses pay out for traveling salesmen.

Why, do you know that a good salesman receives \$2,500 salary? Then add his railroad fare, excess baggage charges, hotel and bus bills, and other extras, which altogether amount to, say, \$7.00 per day, or \$2,500 per year. Hold on! that's not all. He is carrying \$25,000 worth of watches and jewelry over the country (which the baggagemen take pleasure in banging around), on which should be figured 8 per cent. interest per annum, or \$2,000, thus making a total year's expense of \$7,000 for one traveling man; and, even at this, his stock is anything but fresh, and very often the watch movements get tired and won't run (too much exercise in the baggage car and on the express wagons).

Another very important reason why we are able to sell cheap: Any prominent manufacturer of jewelry or watches will tell you that Marquardt's buyer is always on the alert to buy at special inside prices. Our location is so central that all manufacturers of any note come to Chicago, and we very naturally come across a great many special prices, and hardly a week passes but what we are enabled to reduce the prices on some goods, and mark them a little cheaper. Now, we believe any jobbing house who pays the close attention we do to prices cannot help but win the respect of the retail jeweler—the sort of respect, we mean, that ripens into steady mail-order business.

Retail Jeweler: One more important question. Do you confine your trade to the practical retail jeweler?

Answer: Yes, sir; in every sense of the word. We do not send our catalogue, or have any dealings with any others.

We never have, and do not now, sell any one not strictly a watchmaker or employing one. If we can't sell the jeweler we do not sell any one. We are willing to give any jeweler, at any time, a full list of all customers we sell in his town or neighboring town, if desired. Neither do we sell a dollar's worth of goods at retail.

Retail Jeweler: It appears to me you should then have the hearty and full support of the retail jeweler, since you look to none other for support.

Answer: We are glad to say that, judging from the mail-order business we are doing, together with the many letters received from jewelers from all parts of the United States commending our business methods and way of dealing, we have every reason to believe the jewelers appreciate the three points which we are leaders in, viz., lowest prices on earth, confining our trade strictly to the practical watchmaker, and selling no goods at retail.

Retail Jeweler: Well, please make room on your ledger for my name at once, as I believe you are one of the very few jobbers who are working strictly for the interest of the retail jeweler.

Answer: We thank you very much, and you shall have square dealing, new goods, and lowest prices, and we shall always try to be right in line with everything that is good for the retailer.

Yours respectfully,

G. W. MARQUARDT & SONS,

103 State Street, Chicago.

If you are a practical watchmaker or employ one, we want you to have our new Catalogue. Send in your name and address at once.

A Winsome Trio



“Save me from my friends”

said a distinguished cynic, “and I will take care of my enemies.” Allah be praised that our friends don't affect us that way. Perhaps it's because we treat them so well. There is nothing we won't do for our friends. We are as proud of them as a happy father would be over a “winsome trio” like in the above picture. We have done business with them for years, and how well our plan is appreciated by them can best be understood by a perusal of the opposite page. It is no question with them as to where shall they send their old gold and silver, as they are well aware that they will get prompt and accurate returns from

GOLDSMITH BROS.

**Gold, Silver and Platinum Refiners and Assayers,
63 & 65 WASHINGTON STREET,
CHICAGO, ILL**

FREE.—Send for our LITTLE BOOK giving pointers on preparing acids, testing and buying gold, etc., mailed free on application.

Mention THE KEYSTONE.

Old Gold and Silver Bought

OUR PLAN

Immediately on receipt of shipment we will remit by cash or draft (as desired). If our offer should not prove satisfactory, we will return consignment in exactly same condition as received, and pay all charges. By this arrangement you are absolutely safe, as it is no sale unless our offer should prove satisfactory, and you run no more chances than if you were disposing of same right over your counter.

ST. JOSEPH, MO.
Gentlemen: Your check received this day; am pleased with same and obliged for your promptness. Yours,
J. H. TIEFENBRUN.

MANSFIELD, OHIO.
Goldsmith Bros., Chicago, Ill.
Gents: Received check for old gold for \$54.09. All satisfactory. Will send you all my old gold. Yours truly,
M. SCHULZE.

Goldsmith Bros.

63 & 65 Washington Street
Chicago

Haverstraw, N. Y.
Gentlemen: Thanks for prompt reply to package of 13th inst. Very much pleased with amount of check. Will be more careful with such stuff. Did not think it was worth anything.
Respectfully,
THEMANS JEWELRY CO.

Keokuk, Iowa.
Accept thanks for \$165.60 received in settlement for old silver, as per yours of June 5th. Yours respectfully,
T. R. J. AYERS & SONS.

St. Louis, Mo.
Goldsmith Bros., Chicago, Ill.
Gentlemen: Your draft for old scrap received. Perfectly satisfied with amount. With thanks,
Yours, etc.,
WINTER BROS.

Minneapolis, Minn.
Gentlemen: Your favor of the 7th inst., enclosing check for \$123.94, received in full for silver. Thanks.
Yours respectfully,
REED & DAILEY.

Clyde, N. Y.
Gentlemen: Yours containing check for \$58.19 duly received. My estimate was \$60. Your estimate is very satisfactory. With thanks for check, I am yours respectfully,
S. J. CHILDS.

Cleveland, Ohio.
Goldsmith Bros., Chicago, Ill.
Having done business with you before, and knowing you are honorable in your transactions, everything is satisfactory. Yours respectfully,
CHAS. STEIN.

Butler, Pa.
Goldsmith Bros., Chicago, Ill.
Gentlemen: We to-day received your check for \$113.43, for the old gold which we shipped you on the 3d inst. In reply will say that you gave us a little more than we expected. We thought it would be about \$110.00. Please accept our thanks for your remittance.
CLEELAND & RALSTON.

ANNISTON, ALA.
Goldsmith Bros., Chicago, Ill.
Dear Sirs: Your check just received. I am perfectly satisfied with the returns from the old cases sent you; in fact am a little surprised at the returns, for the cases were a hard lot. Hope this may lead to better acquaintance.
Respectfully,
JOHN H. ALLEN.

MINNEAPOLIS, MINN.
Gentlemen: Your check for \$20.25 received to-day. Quite satisfactory. Thanks. Yours respectfully,
W. M. DAVIES.

Chicago, Ill.
Gentlemen: We take pleasure in stating that our business relationship has always been satisfactory and that your silver is always valued more favorably than offered elsewhere.
F. M. STROEFEL & CO.

Chicago, Ill.
Gentlemen: Our business relations have always been very satisfactory.
Yours truly,
M. A. MEAD & CO.

Chicago, Ill.
Gentlemen: Our business relations have always been pleasant and satisfactory.
Very truly yours,
H. F. HAHN & CO.

Chicago, Ill.
Gentlemen: We have always found your valuations of old gold satisfactory.
Yours,
LAPP & FLERSHEM.

Chicago, Ill.
Gentlemen: We are well pleased with your estimates of old gold, and your prompt and satisfactory way of doing business.
Yours truly,
SWARTCHILD & CO.

Chicago, Ill.
Gentlemen: We are pleased to state that our dealings have been perfectly satisfactory.
Yours, respectfully,
STEIN & ELLHOGEN.

Chicago, Ill.
Gentlemen: We have dealt with you for several years past, and cheerfully endorse your reliability and promptness.
ROBBINS & APPLETON,
K. A. KETTLER, Agt.

Chicago, Ill.
Gentlemen: Our dealings with you have been most satisfactory.
MORSE & EYMAN.

Chicago, Ill.
Gentlemen: In all the years of your business transactions with you we have had your checks received on time and in full. We are pleased to state that we have always found the assaying you have done for us correct in every respect.
Yours truly,
J. H. PURDY & CO.

Chicago, Ill.
Gentlemen: We are pleased to state that we have always found your estimates of the greater part of the gold and silver received from my trade, and in every instance reliable and prompt.
ADOLPH SHAKMAN.

Chicago, Ill.
Gentlemen: We are fully satisfied with all deals we have had with you.
Respectfully,
LAMON & CO.

Chicago, Ill.
Gentlemen: We have always found your valuations of old gold satisfactory.
Yours,
LAPP & FLERSHEM.

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Chicago, Ill.
Gentlemen: We are fully satisfied with all deals we have had with you.
Respectfully,
LAMON & CO.

Chicago, Ill.
Gentlemen: We have always found your valuations of old gold satisfactory.
Yours,
LAPP & FLERSHEM.

St. Augustine, Fla.
Gentlemen: Check for \$12 received. Amount perfectly satisfactory. Will be glad to send you all old gold and silver hereafter, as you estimate and remit quicker, and give all it's worth. Thanks.
Yours truly, J. P. DODGE.

Canton, Miss.
Gents: Check received for gold and silver; amount O. K. Will send you all of my shipments. I recommend you to the trade for fair dealing and prompt remittance.
Respectfully,
J. H. PETTY.

Dayton, Ohio.
Dear Sirs: Yours of the 11th inst., containing draft for \$148.79, received with thanks. Yours truly,
THEO. C. LINDSEY.

Kansas City, Mo.
Gentlemen: Your check, \$74.18, received, and is satisfactory. Respectfully,
I. NILES KIMBALL & CO.

Kokomo, Ind.
Goldsmith Bros., Chicago, Ill.
Draft received this A. M. all O. K. Was more than I expected. Yours truly,
C. R. SMITH.

Portsmouth, N. H.
Goldsmith Bros., Chicago, Ill.
Gentlemen: Keep the gold. Chicago beats Boston ninety-four points.
J. H. HUTCHINSON.

Sedan, Kan.
Goldsmith Bros., Chicago, Ill.
Gentlemen: Your draft for \$43.20 received, and I am perfectly satisfied with your estimate.
Yours respectfully,
W. F. STEDMAN.

Painted Post, N. Y.
Goldsmith Bros., Chicago, Ill.
Your draft for estimate of silver I sent you is received and is quite satisfactory, believing I have received its market value.
Very respectfully,
H. D. EDWARDS.

Martinez, Cal.
Goldsmith Bros., Chicago, Ill.
Gentlemen: Your check for \$28.68 received on time. Perfectly satisfactory. Thanking you for your prompt attention, I remain, Yours respectfully,
CHAS. H. WRIGHT.

Pittsfield, Ill.
Goldsmith Bros., Chicago, Ill.
Gents: Your check for \$61.42, for old gold and silver, received; same is satisfactory. Accept thanks for your promptness.
J. L. FIELD.

SWEEP SMELTERS
Goldsmith Bros.
63 & 65 Washington St., Chicago
REFINERS AND ASSAYERS

Old Gold and Silver Bought



This page will bear careful study, and the practical optician can learn from these Questions and Answers much that will be of value in his everyday work and that can not be found in books.

[In order to insure an answer in the next issue, questions should reach us by the 1st of the preceding month.]

[We will take pains to carefully answer all questions of optical subjects, and give advice in the management of difficult cases, and our subscribers are cordially invited to invoke our assistance whenever they find themselves in need of counsel and advice. In addition to giving a careful history of the case, please always give information on the following points:

1. Visual acuteness of each eye.
2. Improvement in vision from glasses.
3. Range of accommodation (without and with glasses).
4. Evidence of astigmatism as shown by radiating lines.
5. Evidence of muscular insufficiency.]

"GEO. V. CAPRON."—A customer (a young boy) has this peculiarity: When he has both eyes open he sees all right, but when he closes his right eye, or it is covered by a disk, he sees two objects when there is only one with the left eye; and no glass or prism makes any difference except changing position of one object. What is the cause and what is the remedy, if any?

This is a case of monocular diplopia in contradistinction to binocular diplopia, in which latter case one object belongs to one eye, the other object to the other eye. The cause of the monocular diplopia in the left eye of this patient can be determined only by a careful personal examination. It is sometimes due to a partial dislocation of the lens or to commencing cataractous changes in the same; to a partial separation of the iris from its attachment to the ciliary body; to a structural disease of the retina; or to some disease of the brain or nervous system. It would be manifestly impossible at this distance to indicate the cause of the diplopia in this boy's case. The remedy will, of course, depend on the cause, but usually these cases are beyond the reach of our help; at least the optician is unable to remedy the trouble by glasses, and only occasionally can the surgeon render any help by an operation.

Our correspondent has failed to give us the visual acuteness of the two eyes, a knowledge of which is very important to a proper understanding of the case. However it is fair to presume that the sight of this left eye is very poor; so poor in fact that the images formed in this eye are ignored when the two eyes are open; in other words, the sight of the right eye is so much more satisfactory, that nature purposely suppresses the conflicting images of the left eye in order to avoid the resulting confusion of sight.

"ATROPIA."—Will you please give me some light as to the use of atropia, directions, etc.? I have a patient, aged sixty-four, requires + 2.50 D. for each eye, but everything appears to be double. He worked at the jewelry business for thirty-five years, but had to quit on account of failing sight. When fifty-five years old could read without glasses all right.

Atropine is the drug that is most frequently used in the treatment of the various diseases of the eye. The optician's interest centers in its action on the pupil (dilatation) and on the ciliary muscle (suspension of accommodation). For these purposes a solution of two grains to the ounce of distilled water will be strong enough.

Our usual custom is to order one drop of this solution instilled into each eye three times before an examination of the eyes, as follows: at bedtime on the previous night, on arising the next morning, and again one hour before the time set for the examination. This dilates the pupil widely and paralyzes the accommodation suffi-

ciently for refraction purposes, so as to make apparent any latent or concealed error of refraction.

Care should always be exercised in its use, and it is a safe rule never to use it in persons past middle age, and, indeed, there is little need for it in such cases for refraction purposes, as age has so far diminished the accommodation that it no longer is any obstacle to determining the real condition of refraction.

In regard to the case mentioned by our correspondent, we scarcely find information enough on which to base an opinion. The difficulty seems to be with diplopia, which in this case is undoubtedly binocular. The following questions naturally arise: when did this diplopia first occur? does he have it all the time, or only when he wears the glasses?

The history of the case being so meagre, we can suggest only the following line of treatment: examine the muscles according to the instructions given in "The Opticians' Manual," and determine if the cause of the insufficiency lies in the external or internal recti muscles. Then measure the insufficiency by the prism required to restore single vision, and if practicable combine a part of the prism with the glasses. Or in other words, determine if the diplopia is homonymous or crossed, measure it and correct as above.

"CRITIC WASHINGTON."—(1) The following question is often asked: Why do flat objects (as a wall) appear convex or concave when looking through prisms, according as the base may be in or out? A little study will make it plain: A prism deflects an object twice as much at a distance of twenty feet as it does at a distance of ten feet. Now, when looking at a flat wall, it is evident that the four corners are farther from the eye than the center, or the part directly in front of the eye. Therefore, with prisms bases in, deflecting out, the four corners are deflected more than the center of the wall, and thus the convex appearance. With prisms bases out, deflecting in, the four corners being the farthest are deflected most in or brought nearer, thus the concave appearance. (2) Is there no danger in wearing prisms when we know that the eyes have to overcome or adapt themselves to this abnormal appearance above mentioned? (3) * * * * Book for Opticians, I cannot understand, if I take his first example, i. e., - .50s \ominus - 1. cyl. axis 90°, turn it one-fourth around, then neutralize the cylindrical element with a - 1. cyl. the remainder will neutralize with a + 1.50s (i. e., - 1. cyl. \ominus + 1.50s axis 180°). Now the author says that we would have made an error by making cross-cylinders; is that right? I thought this would simply be the periscopic form equivalent to the first, double form.

(1) The optical illusions produced by the action of prisms are very interesting, but the proper explanation of the subject would require so much space, and withal would scarcely be intelligible without a set of diagrams, that it will suffice to say that the spherical appearance of flat surfaces when viewed through prisms, can be accounted for by the different deviations produced by the different angles of incidence. (2) There is no more danger to the eyes in wearing prisms than from any other lens that is indicated, as in every case the eyes have to adapt themselves to the new conditions and appearances produced by the glasses. (3) The formula - .50 S. \ominus - 1. C., axis 90°, is the optical equivalent of, and is neutralized by, - 1.50 S. \ominus + 1. cyl., axis 180°.

"CHAS. T. ANDERSON."—I have a patient (a boy sixteen years old) that takes 7. D. (5½ in.) lens to fit. He wears them all the time, and as long as he has them on he does not complain of his eyes, but when he takes them off he complains of his eyes hurting. Is it because he has rather weak eyes, or would you prescribe different glasses?

This is undoubtedly a case of high hypermetropia, evidently of congenital origin. Such glasses seem very strong for a boy to wear, but if the optical defect is great enough to require them for its correction, they are none too strong. When-

ever glasses afford as much comfort when they are worn, and the eyes feel as much discomfort when they are left off, it is pretty safe to conclude that they are about right. As the boy grows older he will need still stronger glasses for reading, while the original pair may still answer for distance.

"OPTICIAN."—I have the following cases in hand: (1) Gentleman about twenty-eight years of age, can see very well in day-time, but at night his eyes have a scratching feeling under lid, and some pains in the eye when trying to read. Can you tell me the trouble? (2) Young man of twenty-five, can just read $\frac{3}{8}$. A + .25 D. S. will blur. A - .25 D. S. makes everything plain. Can't read without glasses over half hour, eyes pain and burn. Cyl. will not do any good. (3) Young man, vision $\frac{3}{8}$. With - .50 D. S. \ominus + .25 C., axis 105° for R. E. and - .25 D. S. for L. E. he can see much better, and is the only thing that will make it clear. Is the above right? (4) Young man, twenty-two, vision just $\frac{3}{8}$. With + .62 D. S. \ominus + .25 C., axis 75° for R. E., and + .62 D. S. \ominus .25 D. C., axis 150°, everything is clear. I have to turn cycls. in frame to get it plain. All the books that I have read say axis at right angles to darkest lines. I have tried stronger cyl. but does not change it any, makes it worse if anything.

(1) In this case we are given no data at all on which to base a diagnosis. It may be hypermetropia, it may be astigmatism, it may be muscular asthenopia, it may be simple weakness of the eyes. In almost any case of eye trouble, the symptoms are worse when the eyes are used at night than in day-time. (2) In this case we can reasonably exclude myopia, hypermetropia and astigmatism, which leaves muscular asthenopia as the possible cause of the trouble. This can be determined by a test with prisms. (3) If this formula improves vision and makes eyes more comfortable, it would be proper to prescribe such lenses. (4) The formula mentioned in this case seems to be the proper correction. It is perfectly proper to rotate the cylindrical lens in the trial frame in order to determine the proper meridian for the axis of the cylinder.

"STUCK."—Please answer this in your valuable paper. Young man twenty years of age. Vision in both eyes $\frac{3}{8}$. Can read smallest type at thirty-six inches on near vision card, and as near as six inches or closer. I have tried - S. and + S., also cyl., nothing will do him any good except R. E. with + .25 C., axis 90°, which corrects the astigmatism in that eye. No astigmatism in L. E. An oculist gave him a glass which I will give below: R. + .62 D. S. \ominus + .62 C., axis 90°. L. + .62 D. S. \ominus + .25 C., axis 80°. He used the above for one year; after that time they were no good; gave out all at once. He is now under treatment for his eyes. I tried his eyes twice; they vary so you can't fit them. He will take a glass one day and the next he will not. His eyes pain when going into strong light. I think it is asthenopia. If you can give me any light on this, you will greatly oblige me.

How is homatropine made? Is it hydrobromate and water? Is it safe? After dropping in the eye, how must I tell when the desired effect is obtained? In the August issue of THE KEYSTONE you said that congestion of the conjunctiva almost invariably follows its use. Is there any danger, or will it pass off?

This seems to be a difficult case to fit with glasses; a careful reading of the history of the case impresses us with the thought that there is some concealed defect, either latent hypermetropia (with some slight astigmatism) or insufficiency of the lateral muscles. In order to determine the former it may become necessary to use atropine, and for the detection of the latter the usual tests so often described on these pages will suffice. Without knowing anything about the temperament and constitution of the patient, we are inclined to think there is a large nervous element in the case, which will probably need medical attention.

In regard to the use of homatropine and the question of its safety, we have answered these questions at some length in the August number, under the heading "Eyes," page 619, to which we would refer the reader.

BOSS BARGAINS



\$15.00

FOR
ONE DOZEN **SOLID GOLD** RIDING-BOW SPECTACLES
ONE OR TWO EYE SIZE. PERISCOPIIC LENSES.

McINTIRE, ULMER & Co.
S. E. CORNER EIGHTH AND SANSON STREETS
PHILADELPHIA

ALL OTHER GRADES OF GOLD SPECTACLES FOR THE HOLIDAY SEASON
FURNISHED PROMPTLY.

Now that we have touched bottom



and business generally is improving, every **GOOD RETAIL JEWELER** should make his stock attractive and so invite customers. He can buy nothing more sure of sale than



of standard quality, at moderate cost, and of new and taking styles. If not called upon by our travelers, send your orders direct to

M. B. BRYANT & CO.,
10 Maiden Lane, NEW YORK.



BICYCLE AND ATHLETIC

PRIZE MEDALS

CLUB AND CLASS
PINS, JEWELS, ETC.

Send for Designs.

New sheet of

PRIZE CHARMS

now ready.

Send for circular of

BOSTON ENGRAVING SCHOOL.

JOHN HARRIOTT, 3 Winter Street, Boston, Mass.

COUNT THE COST

of Time, Patience and Express Charges ON PACKAGES, when half could be saved by sending ONE Package to

HUNT & FULLER,

73 Nassau St., New York.

We manufacture all kinds of Diamond Mountings, do Order Work, all kinds of Repairing, Coloring, Engraving, etc.,

AND DELIVER ALL PACKAGES ENCLOSED.

Aikin-Lambert Jewelry Co. ⁹⁴⁵

19 Maiden Lane, New York,

ARE FULLY PREPARED TO FILL YOUR ORDERS
FOR

WATCHES DIAMONDS JEWELRY

SELECTION PACKAGES WHEN REQUESTED.
WE ONLY ASK FOR A TRIAL.

The Peoria Horological School

The World's Fair is now over, and with a brighter financial business outlook it is expected that at least fifty new students will be enrolled in the Peoria Horological School during the coming season.

The past season has been a magnificent success. Horological schools are business enterprises, and not lotteries, and it costs nothing to measure their worth. The merits of a school depend upon the ability of its preceptors and their ability and disposition to impart their knowledge, and not gilded show and promises. To learn what a school is, inquire as to what it really does, and not what it pretends to do. We invite correspondence from all interested in securing a thorough, practical knowledge of watchmaking and repairing, and at all times invite a personal investigation of our advantages.

Address, **Peoria Horological School,**
1426 Main Street, Peoria, Ill.
L. D. JONES, Principal.

EUGENE DEIMEL,

WHOLESALE JEWELER.

A full line of these goods
always in stock

Watches, Clocks, Chains, Charms,
Tools and Material.

Orders for Materials and Jewelers' Findings accurately filled on shortest notice.

Orders for the LATEST NOVELTIES and NEWEST STYLES promptly filled.

No. 157 Jefferson Avenue,
DETROIT, MICH.

YOUR PATRONAGE SOLICITED.



PORTRAITS

LANDSCAPES

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COMPILED AND ILLUSTRATED
FOR ANY BUSINESS.

JEWELERS' AND WATCHMAKERS' WORK A SPECIALTY.

946 Reduced Prices "H. H. TAYLOR" Grade Elgin Movements.

TAKE ADVANTAGE OF THIS CHANCE TO MAKE A GOOD PROFIT.

After thirty years' trial the "TAYLOR" movement has proved unexcelled as a timekeeper.

We will close out our stock at 25 per cent. off former price.



Next to the "B. W. Raymond" the "TAYLOR" is the Best Grade 18 size Elgin movement.

The Elgin Watch Co. have discontinued the "Taylor" movements.

SEND US YOUR ORDERS
BEFORE ALL ARE SOLD.

H. H. Taylor Movement.

H. H. Taylor, Gilded, 15 Jeweled, Adjusted, Hunting or Open-Face.
H. H. Taylor, Nickel, 15 " " " Hunting only.
No. 33, " 15 " " " Hunting.
No. 80, Gilded, 15 " " " Hunting.
No. 76, " 15 " " " Open-Face.

SEND US YOUR ORDERS
BEFORE ALL ARE SOLD.

Publishers of the B. A. & Co. Catalogue.

BENJ. ALLEN & CO. { 141 & 143 STATE ST. } CHICAGO, ILL.

The Artistic Jewelers' Auctioneer FRANK TRIPLETT

(Gen'l Manager of the Southwest Syndicate Jewelers' Auctioneers),

ST. LOUIS AND SPRINGFIELD, Mo.

By superior tact, skill and methods, or by mere luck—I shall not say which—I have always obtained satisfactory results for customers. If your business is entrusted to me, I guarantee complete satisfaction. Nineteen years' uninterrupted success as a high-grade auctioneer.

REFERENCES: Third National Bank, St. Louis; Silver Metal Mfg. Co., Oswego, N. Y.; B. F. Norris, Allister & Co., Chicago; F. M. Sproehle & Co., Chicago; and Jewelry Jobbers and Manufacturers generally throughout the United States.

Extracts from letters of Jewelers for whom I've made late sales (all made since July 15th, 1894):

G. A. MCHENRY, leading Jeweler, West Superior, Wis.: "If I were to have another sale, I would certainly call on Mr. Triplett again. A perfect gentleman, square as a die. If there is any money, he will get it for you."

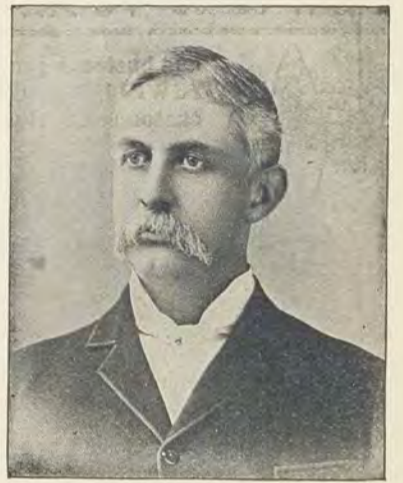
F. W. SWAN, leading Jeweler, Muscatine, Ia.: "If you want a good auctioneer, give Mr. Triplett a trial. You will like him, so will the people."

JOHN WOOLLETT, New London, Mo.: "Mr. Triplett's methods are wonderfully effective. Realized for me an average profit of 35 per cent."

IRA BORDER, leading Jeweler, Cleburne, (formerly Abilene) Texas: "Mr. Triplett gave the utmost satisfaction, realizing profits in spite of the hardest times ever known here. With such an auctioneer, it would pay jewelers to hold a sale every two years."

J. DORENFELD & Co., leading Jewelers, Belton, Texas: "Finest auctioneer in the country. Sale and profits perfectly satisfactory."

Hundreds of similar letters from Jewelers for whom I've made sales.



FRANK TRIPLETT.

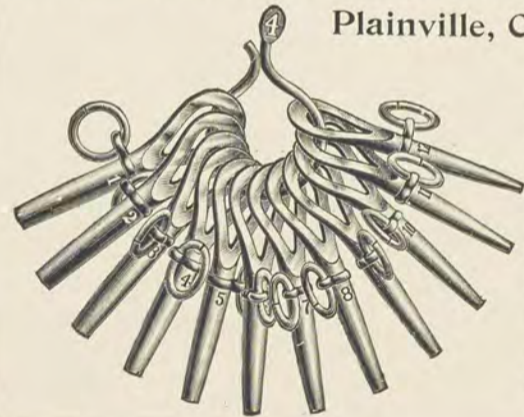


HERE is something new for the ladies—something that every lady who wears eye-glasses will appreciate. We are trying to show how ornamental it can be made, as well as useful.

Every dealer ought to have these Hairpin and Eye-Glass Chains combined in his stock for the fall trade. They are just the thing for Christmas trade. Send to your jobber for them.

S. F. MERRITT,
Springfield, Mass.

A. N. CLARK & SON, MANUFACTURERS OF Clark's Celebrated Loop Watch Keys Plainville, Conn.



Our endeavor to make our Celebrated Loop Watch Key the best key, quality and price considered, in the market is a success, as thousands of watchmakers will testify. We solicit the continued sale of these keys for our mutual benefit.

We also manufacture Crosby's Jeweling Tools, Manicures, Tweezers and Key Rings in variety.

Order keys through your jobber, who will furnish them at our prices. J. H. Walbridge & Co., Box 1895, New York, are our agents for Tweezers, Key Rings and Manicures.

PORTRAITS ON WATCHES.

BY THE NEW ENAMELINE PROCESS.

Results far superior in artistic merit, finish and DURABILITY to work done by any of the old processes.

\$1.50
Postage Paid



MRS. CLEVELAND. LATEST PORTRAIT.

\$1.50
Postage Paid

Samples and Show Cards Free.

Samples and Show Cards Free.

FINE ETCHING ON SOUVENIR SPOONS,
Samples and prices on application.

J. A. GOLDSTEIN, The Central Building, Washington, D. C.

POINTERS FOR UP-TO-DATE RETAILING

Openings.

Have you had your annual holiday opening yet? If not, it is high time you were about it. "The best plan for a jewelry opening," said Fred. Thearle, manager for C. H. Knights & Co., Chicago, to THE KEYSTONE representative recently, "is to have a formal opening in the afternoon or evening, selling no goods at the time. The store should be decorated prettily in all new goods and novelties, being shown to the best possible advantage. The people, to simply pass through the store, get a momentary glance at the goods, just sufficient to arouse their interest and bring them back next day, receive a souvenir, perhaps, and make their exit. For a brief opening of this kind the jeweler can send out among his neighbors and friends at this season of the year and procure enough potted plants and flowers to decorate his store very attractively, and at very little, if any, expense. Their fragrance would fill the store and leave an impression of spring-like freshness and beauty that would linger in the minds of the visitors for a long time. Music enlivens such an occasion wonderfully, and can be secured at a small expense. Should souvenirs be given? Yes, and let them be of as unique a character as possible, and give them to all visitors on the day or part of a day set for the opening ceremonies. The object in giving a souvenir should be to provide the recipient something of sufficient worth to be preserved—something that will call the firm giving the 'opening' to mind in a pleasant manner whenever it is looked at. This object can be obtained just as quickly by having the souvenir free from advertising of any description. In this connection I would suggest that cut flowers from the conservatory make a most taking souvenir for both ladies and gentlemen, and they are comparatively inexpensive. I know some jewelers do not like the idea of special openings. They say that they want people to understand that they always carry the best, latest and most desirable goods, and do not care to indulge in 'splurges.' At the same time I have known jewelers who conducted up-to-date openings along proper lines that found them to be very effective trade-attracting mediums."

By the Way.

Don't ignore the suggestions of your clerks, Mr. Jeweler, in buying goods. Remember that they may know what will sell better than you do.

Stick a Pin Right Here.

Don't allow the general public to think that the dry goods stores can sell jewelry and watches cheaper than you can. Remember that nobody can sell goods "at cost" and live.

Going the Wrong Way.

There is frequently an unlimited amount of price-slashing done by jewelers for no other reason than to "do up" a competitor. Their main idea is to make the fellow over the way uncomfortably warm.

Of course, the public get the benefit; but in a war of this kind the fighters get no credit for their exertions. They only get laughed at for their folly.

Take less interest in your competitor and more in your customers, Mr. Jeweler. It will pay better and lead to more satisfactory results.

A Good Reminder.

Don't wait until your competitor has that "new line." Read THE KEYSTONE and get the credit of always having new goods. Remember that you don't always have to buy a car-load.

Something to be Remembered.

There is no greater mistake that a jeweler can make than to be mean in business. Always taking the half and never returning a cent for the dollars he has made, is a poor policy.

This is a Fact.

There is not a more honorable or a more useful member of the society of any community than a good jeweler, and there is, perhaps, no occupation in life where the honor of a man's word is more looked up to.

Tell Them a New Story.

Jewelers should advertise liberally in their local paper. Don't be satisfied with "running just a business card." Talk about bargains, new goods, holiday and wedding presents, and the newest novelties, and have something new in every issue. Don't tell the same story until it is thread-bare and uninteresting.

Ask Them to Come In.

If you wait for the public to rush in and wake you up with their wants, says a bright exchange, it might be well to tell you that they won't do it—not this winter, or, in fact, any other season of the year. This applies to you, retail jeweler, and we suggest it would be more in line with up-to-date methods to send out invitations to them to call and see your holiday display. That's advertising.

A Good Pointer.

Do not neglect a poor customer for a rich customer. The workingman's dollar goes exactly as far as that of the millionaire. The poor man is more susceptible to fair treatment than his wealthy brother, for riches are often arrogant. The man who has plenty of money takes pride in spending it in various places, but the man who has to make every dollar count appreciates the merchant who gives him polite attention and honorable treatment.

Don't Appreciate His Silence.

A story is going the rounds about a retail jeweler who gloried in the fact that he never paid out one cent for advertising, but who is now kicking because the public do not appreciate his silence. He is sandwiched between two houses that are live advertisers. They get the buyers and he gets the inquirers.

Make Them Useful.

Don't lose heart because you have made a mistake, "it's human to err"; but make of your errors stepping stones to success by the experience they teach.

Those who never make mistakes are usually those who rarely make any effort.

How to Treat Customers.

A jeweler who will make customers "feel at home" has a great advantage over his competitor who chills them, or one who appears unwilling to allow them freedom in the inspection of goods without attempting to force sales. It is a great mistake to be too attentive to customers. Salesmen should always be quick to act on a customer's wish, but he should never annoy a customer by too many suggestions, especially when the customer has stated a wish as to the article desired.

He Pleads Not Guilty.

An up-to-date retailer says he cannot be charged with having ever refused to look at a salesman's samples. "Even if nothing is needed," he continued, "the salesman is pleased, and, as an interview of this kind seldom terminates without advantage to one side or the other, the time is profitably spent. To be petulant to the man who hustles into your office brimful of business, is bad policy. The underlying foundation of all transactions is the live-and-let-live principle. Everybody should be given a chance. As a class, we may be right, but apparently too many of us are wedded to special lines of particular houses, and we cannot give reasons for our action. It is safe to assume we are under no obligations to those from whom we purchase, as our goods are not gifts, but are secured by transactions based upon profit."

Modern Stores vs. Homes.

Do all in your power to make the store, both inside and out, inviting, enticing, and altogether up-to-date.

People of to-day want modern homes, with all modern conveniences. Will they go to dismal, dingy, behind-the-times stores for their jewelry, holiday and wedding presents?

Use every good novelty or new idea you can get hold of, especially in displaying goods.

But do not lose heart because you cannot always hit upon a novel idea in display or advertising.

Despise not good, tried methods, simply because they have been tried before.

Good business methods, well directed, will surely bring success, and half-hearted, spasmodic outbursts cannot be depended on for steady business.

Don't be Afraid of Novelties.

Novelties are the retailers' temporary monopolies. A good novelty, briskly pushed, is both a money-maker and a reputation-maker for the retail dealer, says an exchange. But as the very fact that they are something new carries with it the lack of precedent as to how they will sell, they must be treated as the lion-tamer treats the beast—cautiously, but not timidly. Some dealers shun a novel thing in their line as they would the plague, usually because of some unfortunate experience at an early stage in their business career, and this is a wiser plan than that of the great number of merchants who, judging by their stocks, buy a little of everything that comes along. In regard to handling novelties, there must be sound judgment in buying and energy in selling. Sometimes the latter will atone for mistakes in the former, and it should be a rule when anything new is bought, to push it right to the front at once. There is certainly no use in being the first to buy a novel article and then letting it be unheralded until some competitor establishes some demand for it, and gains all of the credit and most of the profit for introducing it. Novelties are trade and money-makers for retailers, and every merchant should watch for good ones. "As soon as the merchant has it, he wants to let that fact and the merits of the article be known. Why do residents of country towns or suburban districts like to trade with city stores? Because prices are cheaper? No, because they "have all the new things." Novelties, that's it. Don't be afraid of them.

"Good Goods Sell Themselves."

A manufacturer who has tried it says: "Good goods sell themselves; they sell better with good salesmen to represent them, and still better after they have been introduced to the public by generous and judicious advertising. I have tried the three plans. With the first plan, my sales averaged \$20,000 yearly; with the salesmen pushing for orders, they jumped to \$60,000; and by the aid of printers' ink, they leaped to \$270,000 annually. I do not attribute this great increase in business to advertising altogether, for I believe it would have fallen away had I dispensed with the traveling men, but when they were off the road the advertisement was silently talking. It was talking in every section of the country, and at every cross-road. I had made the introduction easy to the drummer who followed, and helped his sales. I took my grip once and went into a territory from which no order had ever been received. No matter to whom I presented my card, there was a familiar greeting. Although no orders for goods had ever been sent to me, I was thoroughly introduced, and no one remarked, 'I never heard of your house before. How long have you been in business?'"

Be Honest.

In my seven years' experience here I have been able to get the confidence of the people so that they not only read my ad., but know they are sure to find the goods, and just as represented, says A. E. Black, of Conneaut, Ohio.

I take care not to advertise an article until I have it in stock, and do not misrepresent. I had a lesson when I first commenced business that was of great benefit to me. I bought a certain article at a price away below the market, had a bill of it, also railroad shipping bill, and was anxious to use it for a leader to draw trade. I sent to the paper an ad. describing and quoting price, expecting that by the time the paper was out it would be in stock, but through an error in shipping it was sent to the wrong State and was nearly a month before shipment was traced and delivered to me. Meanwhile the paper containing my ad. had gone out and many people came to the store asking for it, some of whom came out of their way on strength of my ad. Of course they went away disgusted, thinking it was only a low price quoted on an article which I did not have, simply to get people to come, in hopes that they would buy something else. Instead of being a help it was the reverse.

A. E. Black, Conneaut, Ohio.

Watchmakers' Tools, and How to Use Them.



LXVI.

NASMUCH as the slide *D''*, Fig. 4, November, 1894, KEYSTONE, can be made to move by means of a lathe-cut screw with less expenditure of time than by the steel ribbon we mentioned, we will first describe how a screw can be utilized. Another object in describing the screw action first is, such a screw and all its accessories can be described in one number of THE KEYSTONE, while the steel ribbon motion will necessarily run through three or four such numbers. Where any of our readers are situated to get a screw cut on a first-class lathe, by a first-class man, at a reasonable price, undoubtedly such course is the best policy. But it must be understood that every screw-cutting lathe will not cut a precision screw.

The writer's choice in lathes for such work are the Pratt & Whitney. Not but what we think some other lathes would do equally as good work, but we always feel assured of a Pratt & Whitney lathe doing satisfactory work.

A Screw Micrometer Caliper Described

If a screw is used, it should be threaded for about $3\frac{3}{4}$ " and probably twenty threads to the inch will answer our purpose the best. We show at Fig. 1 of the present issue, the parts *A* and *B* of November, 1894, KEYSTONE, combined, together with the slides *D'' D'* in dotted outline, the dotted outline at *E* representing the screw we have just been considering. This screw *E* is shown separate at Fig. 2.

For making such a screw, the best material is thoroughly annealed steel drill rod. The entire length of the screw and its bearings is 5", and shaped as shown at the full outlines in Fig. 2. When making such a screw, it is well to employ a pretty good size, something about $\frac{1}{2}$ " in diameter, leaving the screw about $\frac{1}{32}$ " in diameter after it is turned. We cannot urge too strongly the importance of extreme care in turning and finishing such a screw. After the turning is done, the thread should be ground smooth by means of fine emery and oil, using the end of a stick, so the smoothing would extend to the bottom of the thread.

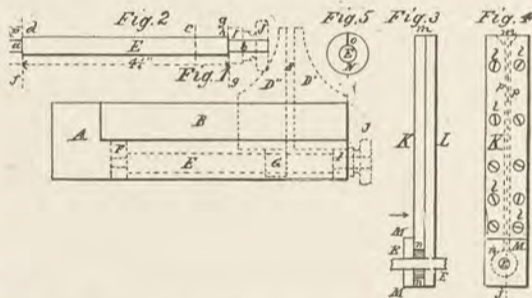
It would be wise to also lead-grind the thread after smoothing with a stick as described. The lead for grinding, in this instance, should be cast on under at least a foot of hydrostatic pressure, to entirely fill the threads. To do this, let us, after the screw is smoothed as directed, procure three pieces of pine board about 3" wide, two pieces each 15" long, one piece 3" long. The three pieces are united as shown in Fig. 3, which is an edge view of the boards, and Fig. 4 a flat view, or as if Fig. 3 was seen in the direction of the arrow.

The idea of this wood device is to provide a chamber at *n* for lead. A hole is bored in the piece of board *K*, 1" in diameter, and one is bored in *L* just large enough to allow the screw *E* to pass tight. The short piece of board *M* is bored to fit the screw *E* and placed on said screw and turned up until *M* clasps *K* tight. We have now a chamber 1" long and 1" in diameter, surrounding the screw *E*, enclosed by our pieces of wood. We next make a channel from this recess in the board *K*, as indicated by the dotted line *p*, extending to *m*, which is cut out to form a sort of funnel for the melted lead poured into the chamber *n* through the channel *p*.

How to Grind the Threads of a Screw

It will be seen the pressure formed by the column of lead from *n* to *m*, will fill the threads of the screw perfectly. We should have said the threads of the screw *E*, before being placed in the chamber, should be oiled with kerosene and dusted with flour of emery. By taking this plan, a coat of emery will extend through the entire length of the female screw of the lead nut *N* cast in the chamber *n*. The board *M* is screwed off, and a little sperm or other machine oil applied to the screw *E*, when the nut *N* can be turned on *E*.

Both boards *K L* are removed, and the nut *N* run back and forth on *E*, which not only gradually smooths the screw, but equalizes the pitch of the threads and brings the screw to be of precisely the same size from end to end. When the lead nut runs a little loose, dusting on the screw *E* a little dry, fine emery will again cause the nut to run tight. We show at Fig. 5 a side view of such a lead nut seen in the direction of the axis of the screw. Now,



if we saw a slot in the nut at *o*, parallel with the axis of the screw, it can be tightened up so as to grasp the screw close after wear. It is well to cast two or three such nuts on *E*, and not depend too much on closing up by the slot *o* for wear. Such grinding will soon produce a screw of great smoothness, and of the same size from end to end.

If any of our readers should have such a screw turned, they should insist and see that the process was carried out, of grinding the cone centers to the lathe in which such screw was turned to absolute truth. The bearings *F I* for the screw *E* should be set so as to be absolutely parallel with the bar *B*.

"Every number of The Keystone seems like meeting an old friend out here, and I must have it."—Jesse Collom, jeweler, Great Falls, Montana.

Hints About Fire Insurance.

An exchange makes the following valuable suggestions on fire insurance: Before taking out a policy the capital of the company, and still more the character of the men who control it, should be scrutinized; and this is not always an easy matter to accomplish. As a rule it is better to pay a higher rate to a safe company than a lower one to a poor one, for the best of all reasons, that one is insurance and the other isn't; or at least you don't know that it is when you pay your money in return for the risk.

Another point to be considered is the method of doing business, which varies even with companies of equal standing as to solvency. Some make it a cardinal point to take all they can get from policy holders and give as little as possible in return. It often happens that without refusing payment altogether the insurer will shave the loss down to the lowest notch; and the losses thus sustained by the insured are often ten times more than the highest rates charged by companies of the very highest standing. This is a very common practice in modern underwriting, and never fails to defeat its own purpose; nor should it. In such cases low rates should offer no inducement to property holders who want to place themselves above peril, and to realize a sense of absolute security in case of fire.

We have another hint to make, and it is an important one. Before paying out money for insurance, the policy should be carefully read and studied from end to end. Insurance papers, it should be noted, are always drafted by lawyers, and are often difficult of comprehension by the

ordinary run of people. If you do not understand them you are signing a contract without knowing what you or they agree to do; and this is not a safe way of doing any business, much less that on which everything you own in the world may be at stake. Important as this matter is, it is notorious that not half the policies are read over, either before or after signature. It is simply taken for granted that they are all right, but it is just as well to know what you are paying for. In neglecting to look through your contract you are buying "a pig in a poke," and for aught you know a poke with no pig in it. This is not a good business form. Better study your policies in the office of the company that issues them, or, what is still better, at your own desk, than seek light among burning embers or crumbling walls.

A Minnesota Preferred Creditor.

Not everything which happens in the West is truly Western. Here is a little incident that took place in a Minnesota town a number of years ago, which might as easily have occurred a good deal farther east.

A man whom we may call Billson had for some time carried on a jewelry store in this town. He at last became weary, and determined to make an assignment, being naturally, if not a Napoleon of finance, at least a Blucher of money matters. There was another man in the town, named Jimson, who was, the chronicler is under the impression, a brother-in-law, or something of that sort, of Billson's. Jimson was no master of finance, but a plain, blunt man, strictly honest, and of a nervous, excitable temperament.

Now while in the midst of making his assignment it occurred to Billson that it would be a clever stroke to make Jimson a preferred creditor. There were, however, difficulties in the way which his penetrating business eye recognized a long distance off, chief of which was that he didn't owe Jimson anything. But Billson asked himself this question, "Do Napoleons Napoleonize?" And he answered that they did. He therefore decided to make Jimson a preferred creditor in a way sometimes not entirely unknown to similar business transactions of a larger caliber. He quietly told Jimson to drop around to his jewelry store that night at a little before twelve o'clock, adding simply the one admonition, "Back door."

Promptly at the hour mentioned that night Jimson was on hand at the rear of the store, nervous, but clear in his ideas of right and wrong. Unto Jimson now appeareth Billson, and sayeth:

"Jimson, here are six good clocks. Take three under each arm and carry them home, for early in the morning the sheriff, Hawkins, in the interest of my chief creditor, Jawkins, will take possession of everything." Jimson started off.

For two blocks Jimson had a fair passage; then began an area of low atmospheric pressure for him. He was bearing straight down the middle of the deserted street. It was a warm summer night, pitch-dark, and without a breath of wind. Suddenly he stepped on a small stone, and the wire of the striking apparatus of one of the clocks gave forth a slight sound.

Under the circumstances, to the ears of a nervous but honest man it sounded like the ringing of Christmas chimes. He gave a quick step, and another wire vibrated and rang out clearly. To a citizen of Jimson's strict principles this sounded like the firing of great guns. He broke into a light trot. Every clock began to ring gently, but it smote the ear of the upright Jimson like a volcanic eruption. He began to run, and his honest ear was numbed and stunned with the uproar. Suddenly he realized that he must pass between the houses of Sheriff Hawkins and Creditor Jawkins, which stood on opposite sides of the street. Jimson no longer ran. He leaped through the darkness like a kangaroo. The clocks rang merrily. When precisely between the houses of Hawkins and Jawkins the six clocks each began to strike the hour of twelve. With a gurgling cry of despair, Jimson jumped straight up into the air, and came down in a heap, the clocks rolling all about him and continuing to strike, while the alarm in each one of them went off and tore the air into shreds. Up from out this crash and roar and wreck arose one Jimson, still firm for the right. Brushing the flying bits of brass wheels and steel springs from before him, he ran like a frightened deer for home. As an honest man, he felt no longer safe in the company of those humorous timepieces.

Official Hawkins and Citizen Jawkins came out with lanterns and gathered up the debris. The next day the local paper referred to a "Most extraordinary shower of clocks on lower M. in Street Thursday night. Old settlers do not remember anything of the kind before. We advise our citizens to carry sheet-iron umbrellas and run for cover at the first alarm."

—H. C., in Harper's Magazine.

TRENTON MOVEMENTS?

If not, why not?

For intrinsic value and great merits combined with **lowness** of price, they far surpass any movements ever placed on the market.



No. 30—Nickel Damaskeened, Seven Jewels, Cur Expansion Balance, Safety Pinion, Straight-Line Lever Escapement, Screw Bankings, Quick Train, Handsome White Enamel Dial, and fitting all regular 16-size Lever or Pendant-Set Cases.



No. 50—Nickel Damaskeened, Seven Jewels, Cur Expansion Balance, Safety Pinion, Straight-Line Lever Escapement, Screw Bankings, Quick Train, Handsome White Enamel Dial, and fitting all regular 6-size Lever or Pendant-Set Cases.



No. 35—Nickel Damaskeened, Eleven Jewels in Raised Settings, Cur Expansion Balance, Micrometer Regulator, Safety Pinion, Straight-Line Lever Escapement, Screw Bankings, Quick Train, Breguet Hairspring, Handsome White or Fancy Dial, and fits all regular 16-size Lever or Pendant-Set Cases.

Every Trenton Movement sold recommends a duplicate.

You can increase your trade by selling them.

Send for our new illustrated list of movements at **REDUCED PRICES**, and order from your Jobber.

If your Jobber can not supply "TRENTONS," we will give you a list of Jobbers who can.

INSIST UPON HAVING THEM.

Trenton Watch Co., Trenton, N. J.



No. 70—Nickel Damaskeened, Seven Jewels, Cur Expansion Balance, Safety Pinion, Right-Angle Lever Escapement, Screw Bankings, Quick Train, Handsome White Enamel Dial, and fitting all regular 18-size Lever or Pendant-Set Cases.



No. 90—Gilt, Fifth Second Chronograph, with Start, Stop and Fly-Back working from the Pendant, Nine Jewels, Cur Expansion Balance, fitting all regular 18-size Open-Face Cases, and warranted in every respect, Plain or Fancy Dial.

A Hint

To the Retail Jeweler

EVERY RETAIL JEWELER should insist upon having his goods made seamless or without solder. Solder will show in time, consequently you can not guarantee your goods to wear unless you can show that they are made of seamless tubing.

LOOK TO YOUR INTEREST when buying jewelry and see that the goods are perfect in finish. Jewelry that will turn green from the result of poor soldering will not advertise your business, but, to the contrary, will hurt your trade.

SEAMLESS TUBING is used and endorsed by all the leading manufacturing jewelers. It is made in all sizes, and can be adopted for all purposes where tubing is required. When buying, examine well and see that you do NOT buy goods that are soldered.

To the Manufacturing Jeweler

The above mentioned article can be had in Solid Gold, Silver, Brass, Copper and German Silver from

CHARLES NOBS,
24 Boudinot St., Newark, N. J.



Buy the

RIVETT LATHE



and you will never have to write us the following questions, which we have to answer every day:

"Will you make the RIVETT Attachments to fit my lathe?"

"Will you make the RIVETT Chucks to fit my lathe?"

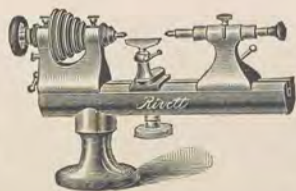
"Will you take my lathe in exchange for a RIVETT?"



The new RIVETT Tip-Over T-Rest is given with every RIVETT Lathe.

Ask your jobber for the RIVETT Lathe with Steel Bed, and compare before buying. Jobbers who keep the best goods, keep the RIVETT.

Faneuil Watch Tool Co.



Office:
474 Washington St.,
BOSTON, MASS.

Factory: Brighton,
BOSTON, MASS.
Faneuil Station, B. & A. R. R.



DIAMONDS



We have a very complete stock of **mounted** Diamonds and a large reserve stock of **loose** goods. Importing direct, and cutting much of our stock, we furnish these goods at the lowest price consistent with the quality.

We have made no advance in our prices on account of the new tariff law recently enacted, although knowing that all precious stones imported now must bring higher prices.

We can with little delay make to order special styles of mountings when they cannot be furnished from our stock.

We respectfully solicit your orders, and ask when you have a prospective customer for goods not in stock, you send to us for a selection.

HAYDEN W. WHEELER & Co.

50 HOLBORN VIADUCT,
LONDON.

2 MAIDEN LANE, N. Y.

N. B.—We have two or three specials in 14 K. Filled Complete Watches—very desirable.
Write for descriptions and quotations.





The important local event among the trade during the past month was the almost regal banquet of the New York Jewelers' Association, given in Delmonico's, on November 15th. It was quite as brilliant as any of its predecessors, which is saying much for it, and the hilarious banqueters gave no indication of dissatisfaction with either themselves or the times. Their good humor, however, was more due, we opine, to the surroundings and auspicious trade prospects than to present prosperity. The volume of trade, though fair-sized, is below the ante-holiday average of good years. Unfortunately the conservatism of the retailer still flourishes, and he persists in purchasing to supply immediate rather than prospective wants. An encouraging improvement is noticeable, it is true, but time is needed to re-invigorate the still enervated body commercial. A rushing business is being done by some individual firms.

The United States Diamond Cutting and Polishing Co. was incorporated in Albany a few weeks ago, with a capital stock of \$10,000. The directors are Ludwig Lilienthal, of 21 Maiden Lane, this city; Doris Sanders, of Amsterdam, Holland; Paul Bruhl, of Paris, France; and Emil Wayworth and Julius Goldman, of this city. The new Company's office is at 21 Maiden Lane.

S. Konijn & Co., diamond cutters and polishers, of Amsterdam, have established a branch office in the Sheldon Building, 68-70 Nassau Street. The firm are to sell diamonds wholesale exclusively, which they will import direct from their diamond-cutting plant in Amsterdam.

Max J. Lissauer, of Lissauer & Co., 12 Maiden Lane, was one of the victorious committee of seventy, and has been receiving congratulations ever since the election.

Cross & Beguelin, 17 Maiden Lane, are renovating and redecorating their store.

B. & W. B. Smith, the show case manufacturers at 220 West Twenty-ninth Street, recently furnished some rarely beautiful wall and counter cases to Bailey, Banks & Biddle, of Philadelphia. They also supplied rosewood circular counter cases to the Dierer Hermanos Co., of the city of Mexico.

Heller & Son, dealers in precious and semi-precious stones at 141 East Broadway, have opened a branch office at 61 Nassau Street.

Borcher & Axelby, formerly with Dominick & Haff, have begun the manufacture of silver novelties at 8 Abingdon Square.

Charles Constant Cottier, of C. Cottier & Son, 14 Maiden Lane, died recently at the age of eighty-five years, at his home in Jersey City, N. J. The deceased was a leading American lapidary.

A. Teweles has begun business at 100 Nassau Street as a manufacturer of jewelers' and silversmiths' trays and sample cases.

M. Laurance, traveling salesman for the Spencer Optical Co., returned to the city recently from a seven weeks' trip through New York State and Pennsylvania. He spoke well of business in these two States, and said that retailers anticipated a fairly good holiday trade.

Frederick Steinman, traveling salesman for F. W. Gesswein, 39 John Street, was seriously ill with pneumonia in Cincinnati, but latest reports say that he is recovering.

Friedman & Ascheim, jobbers in watches, have removed from 51 Maiden Lane to more commodious quarters in the Knapp Building, 41-43 Maiden Lane.

E. E. Robert, 21 and 23 Maiden Lane, is the agent in this country and Canada for the watches of Vacheron & Constantin, of Geneva, Switzerland.

Albert Lorsch & Co. contemplate largely increasing their stone department, and to that end will sell out the jewelry branch of their business, which they expect to have disposed of by January 1, 1895. The rapid development of their stone business makes the elimination of jewelry desirable.

Byron L. Strasburger & Co., 31 Maiden Lane, have leased the first floor of the building, 17 Maiden Lane, for a term of four years, and will move thereto early next year. The new quarters will be much larger and more commodious than those now occupied by them.

L. Tannenbaum & Co., diamond importers and cutters of precious stones, corner of Maiden Lane and Nassau Street, have installed nearly all the machinery for their new diamond cutting and polishing plant at 1 Maiden Lane, and operations will be commenced at an early date.

E. A. Kretschman, formerly jewelry engraver with C. G. Braxmar, 47 Cortlandt Street, has opened an office at 103 Fulton Street.

The firm name of H. B. Peters, 177-179 Broadway, has been changed to H. B. Peters & Co. The firm has increased its facilities for attending to the wants of the trade, and promises jewelers even greater satisfaction than hitherto.

The number of diamond cutters arriving here from Amsterdam would indicate a local boom in the diamond-cutting industry. In fact so numerous have been the arrivals that many of them were detained by the immigration authorities on the suspicion that they came here under contract. They were well posted, however, and though the suspicion still exists, the authorities could make no discovery which would justify their being sent back. They were consequently discharged. Several diamond-cutting plants are being perfected.

The Jewelers' League announces that the sixth assessment for 1894 will close on December 12th. Members are requested to bear in mind that assessments will be made the first of each month, beginning January 1, 1895. They will thus be made regular and in small amount.

"Enclosed find one dollar, for which renew my subscription to The Keystone. If it took every dollar I made to pay my board, I would 'back' long enough to get a dollar ahead and procure The Keystone rather than do without it."—M. Sporleder, Guthrie, Oklahoma.

Correct Catalogues.

How to Make and How to Circulate Them.

BY NATH'L C. FOWLER, JR.,
Doctor of Publicity.

PAPER NO. VIII.

The commercial definition of a catalogue is a printed something which describes something.

A catalogue must tell the whole story, briefly if possible, of the article presented.

As the majority of catalogues reach non-technical readers, even the scientific catalogue should not be too technically scientific.

The ignorant man can understand plain English, and the intelligent man appreciates simplicity.

Sometimes technical terms must be used, but they need not be over-used.

Even if a catalogue is to reach only experts, there is no reason why it should be crowded with technical terms when plainer English will tell the story as effectively.

As the manufacturer does not know where his catalogue will go, as its circulation after it leaves his office is beyond his control, he should make the catalogue intelligible to the scientific reader, if it be a scientific catalogue, and intelligible to the reader who has not the technical education, because by so doing his catalogue will serve a double purpose.

A catalogue should never contain illustrations unless the illustrations are able to do justice to the goods illustrated. Better have nothing but plain text, if that text be well written, than pictures which give no adequate idea of the article presented.

If the illustrations be other than outline, they must be printed upon first-class paper with first-class press work.

The explanation of a picture should be on the same page as the picture, or on the page facing it.

A catalogue should contain a very brief preface.

Once in a great while a man is discovered who likes to read a preface, but generally that man hasn't cash enough to buy a paper of hairpins.

The title page of a catalogue should not be plastered over with names of officers and directors.

The cover of a catalogue should not contain advertising.

The cover should present only the title, with or without a decorative illustration, and the cover illustration should never be of a technical character.

If a catalogue does not contain too many articles, and is to give prices, let those prices appear with the descriptions. Don't crowd them into the back of the book.

A catalogue should never be sent to promiscuous lists of names, and should seldom be sent to anybody unless it is asked for.

Something for nothing isn't business, never was business, and never will be business.

A catalogue should be sent to inquirers, and generally it is inadvisable to demand a stamp for it, because the effort necessary on the part of the asker is all the pay he is ex-

pected to give for a thing which is supposed to be more in your interest than in his.

Advertise the catalogue, and say you will send it for a postal card request, and, if the catalogue be an expensive one, generally accompany it with a personally written letter.

The trade paper offers a legitimate means for the circulation of catalogues.

The catalogue should be extensively advertised in it, and sent to all who ask for it.

There is no objection to requesting the askers of catalogues to give you the names of others who might like to receive it, and in that case you should send a personal letter to those parties, stating that you send the catalogue at the request of another party.

Catalogues, if not too expensive, should be given free to any one who asks for them.

Generally one can afford to give away as many catalogues as people ask for, or send for, for if the receiver does not buy the goods himself he is liable to place the catalogue somewhere where somebody who wants the goods may see it.

If a concern issues a very expensive catalogue, it should have a supplementary catalogue, and should push the circulation of this smaller catalogue, and in that smaller catalogue announce that under certain conditions the larger catalogue will be sent.

A catalogue is a legitimate book of information upon the subject it illustrates, and it should be valuable to buyers of the goods it presents, whether such buyers buy of you or of somebody else.

Do not understand that I recommend that a catalogue be so much of a book that your goods are not properly presented, for there is a way of making your goods a part of the book without hurting the book, and there is also a way of making your goods so prominent that the catalogue is nothing more or less than a collection of hand bills announcing the goods you have, of interest to you and of no interest to the outsider.

Always remember that you are writing the catalogue for the receiver, not for yourself; that something of interest to you may not interest others, and that your catalogue should have intrinsic value which will force the receiver to preserve it, and he will not keep a book which is a medley of bald-headed advertisements, with so much advertising in them that one cannot discover anything worth reading.

Net Price-Lists.

THE KEYSTONE. YOUNGSTOWN, PA., Nov. 9, 1894.

I would like to give my opinion through your excellent paper in reference to net price-lists, and at the same time take up as little space as possible. I have in mind two firms who, in their catalogues, give the net price of plain band and oval rings per dwt., and sectional views of the rings, showing the different styles and sizes on same page. How do they expect a jeweler to show a prospective buyer the style of a ring when taking an order for same?

I remember a couple of instances in which customers of mine got these price-lists in their hands and took note of the prices of plain rings per dwt., while I was taking their order.

Now I am not ashamed of my prices and feel sure that no reasonable person would consider my profits too large even if they knew the cost of the goods, yet there are others who would consider five or ten per cent. sufficient profit on such a staple (?) article as jewelry. There is still another kind of net price-list I object to. It is the circular describing a special bargain or some new article not to be found in the regular catalogues. Now I am located in a small town and do a large part of my business by taking orders for goods it would not pay me to keep in stock. How am I to take orders from a net price-list, some of them not being subject to cash discounts even? As there are so many jobbers who issue net price-lists, I thought this would be the better way to bring the matter to their notice. If my ideas concerning this matter meet with the approval of other jewelers situated as I am, I would be pleased to have them express their views in THE KEYSTONE. I remain, yours truly,

CHAS. CUNNINGHAM.

Hammering.

Apply this to your business. Keep your forces hammering away in useful directions.

Never let up. You cannot afford to keep idle salesmen or workmen. Don't harass them if you cannot always give them enough business to keep them busy; but let your hammering be on the nail that will keep your business booming and your workmen or salesmen profitably and pleasantly employed.

Hairsprings, Springing and Adjusting.



IV.

THE reason why we insist on the inner end of a hairspring being clasped securely is because a very slight slip, or crawl, would lead to a serious error in gauging. We repeat at Fig. 1, of this issue, Fig. 1 of November, 1894, KEYSTONE, except we have shown the inner end of the hairspring, at *u*, bent downward instead of upward. If we imagine the slotted arbor *A* to be revolved in the direction of the arrow *d*, we can see there is a constant tendency toward drawing through the slot *a*, which will reduce the reading of our gauge. We mean by this, that a spring so gauged would cause the watch to run faster than the force as indicated by the gauge would warrant, from the fact that the spring slipped in the slot, and was really stronger than the gauge indicated.

Details of How a Hairspring Gauge is Made

The first part to make of our gauge is some device for grasping the inner end of the hairspring and holding it secure while being gauged. About the simplest device we know of for this purpose is shown at Fig. 2, as if seen sidewise. It consists of three pieces, *b*, *g*, *E*. The pieces *b* and *g* are alike, except they are faced together, as will be understood by inspecting Fig. 4, where one of these pieces is shown separate. In Fig. 2 the faces of the side opposite the arrow *i* are brought together. The pieces *b g* are made of sheet steel about $\frac{3}{16}$ " thick, and shaped as shown in Fig. 4, where the part delineated is about twice the actual size.

The idea of the device is, the projections, or jaws, *b g* spring together by their own elasticity and clamp the inner end of the hairspring while being gauged. The part *E* is made of steel wire about $\frac{1}{16}$ " in diameter and $\frac{3}{16}$ " long. In the end of *E* is drilled a hole which will just receive the jaws *b g* below the dotted line *h'*, Figs. 2 and 4. In the end of the part *g'* is drilled a hole about $\frac{1}{4}$ " in diameter, which will ultimately receive the end of the top pivot of the gauge. The pieces *b g* are shaped so that, on being driven into *h*, the jaws *b g* are closed tightly together.

How Hairsprings are Held for Gauging

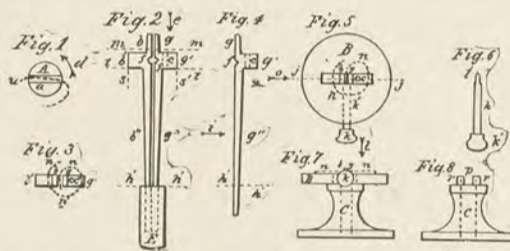
The next part of our problem is to get up some arrangement for holding the device shown in Fig. 2, and also temporarily separating the jaws *b g* to receive the inner end of the hairspring *n*. To make such a holder we get up a brass base and table, about 1" high, shaped in vertical section as shown in Fig. 7. The base is shaped as shown at the part *C*, and has a hole drilled in the center which will just receive the handle *E* of the hairspring holder. The table *B* is a round disk of sheet brass, about $\frac{1}{16}$ " thick and 1" in diameter.

In the center of the disk *B* we drill a hole of the same diameter as the width between the lines *s s'*, Fig. 2. At Fig. 8 we show the base *C* separate, and it is on the ledge *r* that the table *B* rests, or rather, is secured with soft solder. In the top of the base *C* we cut a slot of the width or the thickness of the jaws *b g*, and in depth, down to the step or shoulder *r*, shown at Fig. 8. If we now look down on the united table *B* and base *C*, in the direction of the arrow *l*, Fig. 7, the disk and base will appear as shown in Fig. 5, except we have shown the jaws *b g* disproportionately large.

Into the slot *p* go the shoulders *b' g'* of the clamp shown in Fig. 2. When the clamp shown in Fig. 2 is dropped into the hole and slot in the base *B C*, the jaws will protrude a little, as shown in Fig. 7. It is to be understood that the clamp shown in Fig. 2 fits loosely in the base *C B*, so that if said base is turned bottom side up the clamp will fall out, and it may not be amiss to add that the bottom of the projections *b' g'*, Fig. 2, will rest in the bottom of the slot *p*, Fig. 8. In order to open the jaws *b g* to receive the inner end of the hairspring to be gauged, we drill edgewise through the disk *B*, as indicated by the dotted lines *k'*, Fig. 6. The drill should be about $\frac{1}{20}$ " in diameter. Into this hole goes the bolt, or pin, *t k' k*, Fig. 7.

How the Hairspring Clamp Works

It will be noticed that there are two notches at *f f'* in the jaws *b g*, Fig. 2, and it is into the recess formed by these notches that the point *t* of bolt *k'* goes to open the jaws *b g* to receive the inner end of the hairspring. It



is to be understood that the hairspring is placed so the inner end conforms to the position indicated by the dotted curve *n*, Fig. 5. The pin should open the jaws *b g* no wider than is necessary to readily admit the hairspring, or the strength of the grip will be diminished and the clamp will fail to hold the inner end of the spring securely.

When we are about to gauge a spring we drop the clamp, as shown in Fig. 2, so the jaws *b g* protrude, as shown in Fig. 7, and then push in the bolt *k'*, Fig. 7, so the point *t* separates the jaws *b g*. We then place the hairspring so the inner end coincides with the dotted lines *n*. When the hairspring to be gauged is properly placed, the hole *c* in the piece *g'* is free and unobstructed, as shown in Fig. 3, which is an end view of Fig. 2 seen in the direction of the arrow *e*. After the hairspring is properly placed, we pull back the pin *k'* by the head *k*, and the jaws *b g* grasp the inner end of the hairspring; we turn the stand shown in Fig. 7 bottom side up, and the clamped hairspring falls on the bench securely clamped. At our next interview we will commence our gauge.

A Handsome Jewelry Store.

The cut here shown represents the interior of the handsomely fixtured and well stocked store of William Sheldon, at Adrian, Mich., one of the most enterprising jewelers of that section. This store, which is recognized as being the leading jewelry establishment in Adrian, was founded by the present proprietor eleven years ago, and in its conduct he has demonstrated the strongest claim to the distinction accorded it. It is elegantly fitted up in modern style, and is filled with an extensive assortment of diamonds, watches, clocks, jewelry and art goods. Mr. Sheldon controls a large and steadily increasing trade in the city and the surrounding country. He

is a native of Adrian, but spent a number of years in Cleveland, returning in 1883 to open this store. Mr. Sheldon is a practical jeweler and is well versed in every detail of the business, to which he gives the strictest personal attention and supervision. He is a prominent citizen and an honorable business man. He has at his fingers' ends all the details of store-keeping on approved principles, and his enterprise is luckily being rewarded with a generous measure of success.

The Florist and the Boy.

"Uncle John" Thorpe stood among his flowers one morning, thinking how much better they were than the money that bought them.

The front door opened slightly and there came through the crevice a very small boy, much tattered as to clothes and having streaks of the town dirt across his face.

He saw "Uncle John" back among the flowers and said: "Mister."

"What is it?"

"Say, I want a rose," and he held out a penny.

"For one cent?"

"Dat's all I can blow."

"You'd better let me give you a carnation. It looks just as well in a gentleman's button-hole," with a smile.

"No kiddin', mister. I ain't wearin' flowers. It's for me pardner."

"Your pardner?"

"De kid dat's always been wit' me. He's out in t'e hospital and I t'ought he'd like to have a rose."

"Uncle John" picked out the rarest and sweetest rose of all and took the penny. The boy went away with the great nodding blossom hugged against his torn vest and "Uncle John" was left with the reflection that there are some things in the world as beautiful as flowers.

It was a week later when the door again opened and the same tattered boy, his face unnaturally clean, came in and once more found "Uncle John" at home.

"Mister."

"Hello, here's the boy that bought the rose. How's your partner?"

"Dat's what I came in about. He's dead."

"That's too bad."

"Say, mister, do you make dem 'Gates Ajar' t'ings for to put on coffins?"

"Yes, sometimes."

"Well, t'e boys have clipped in for one and here's the stuff," and he opened his right hand, which was heaping full of pennies and nickels.

"Uncle John" gathered together the coins and counted them. The total was seventy-six cents.

"We t'ought for dat we could get something purty nice fer t'e kid."

"Yes, indeed; come this afternoon."

The boy went away undecieved. "Uncle John" as he wired together the green strands and the rich clusters of bloom again reflected, and his reflection was that the gates must be ajar for such "kids." —Chicago Record.

"I received your Keystone to-day. I would not do without it. Your book will teach the greater part of the jewelers more than they think if they would only read the book from beginning to end without skipping any pages." A. B. Hauser, jeweler, Dubuque, Iowa.



Interior View of Wm. Sheldon's Store, Adrian, Mich.

High-Grade Hamilton Watches

American Watches are the best timekeepers in the world. We make the best American Watches.

American Watches have become unpopular with the retail jewelry trade because they do not afford a fair profit to the dealer. This is due to three causes:

They are placed on the market through Jobbers, who sell them to Department Stores, Notion Dealers, Cigar Manufacturers, Peddlers and all sorts of irregular traders.

The different grades are designated by *names*, which become familiar to the public, and purchasers are enabled to excite excessive competition among the dealers.

Catalogues and printed Price-Lists educate the people about values, and increase the difficulty of making satisfactory profits.

The Hamilton Watch Co. sells to legitimate *Retail Jewelers* only; does not designate its movements by names; and issues no Catalogues or printed Price-Lists. It protects its customers from interference from all who are outside of the craft, and insures as good profits as can be made on foreign watches.

Prices guaranteed and full rebate on all movements that may be reduced in price or discontinued. Our line of 18 size Movements is now complete. Other sizes of all grades will soon be added to the list.

See our new Watch with **Steel Escape-Wheel**, a valuable improvement that has never been successfully accomplished by any other American factory.

Hamilton Watch Co.
Lancaster, Pa.

Jottings by a Wanderer.

A Retail Jeweler's Pleasure Trip to California and Back.

By GEORGE ARKWRIGHT, Beatrice, Neb.

LETTER V.

Mark ye well her bulwarks, consider her palaces; that ye may tell it to the generations following.



San Carlos Mission Tower.

MONTEREY is not a place to abandon to the archives of memory, without a parting backward glance and the bestowal of a few brief words in conclusion, as the preachers say. It was the privilege of our party to meet the priest in charge of San Carlos Mission of Monterey, who is a descendant of its worthy founder, Father Junipero Sierra. We took sweet counsel together, as we strolled for an evening walk in the direction of the ancient Mission church. A holy calmness permeates the air, the sun sinking into the trackless main and spreading a golden path across its rippling waves. Overhead the sky merged from the golden halo surrounding the departing orb into a sapphire hue. Chasing across this vast ethereal dome were scurrying clouds, torn and shredded as with wind that soared too high to stir a leaf ashore or disturb the peaceful calmness of this vesper hour. Here in this land which lays beyond the spreading plains, beyond the snowy mountain chains and back of the setting sun, with pallid face and bloodless lips the spirits of the padres walk at such a twilight hour. No artist's brush with inspiration's touch could hope to catch this shimmering light that fell in parallel rays o'er land and glimmering sea. A sacred sheen diffused itself around this creamy tower and touched with ruddy glow the bright tile roof. Our companion, the good Father of San Carlos, is yet a young man in years, of Spanish blood, with raven locks and swarthy skin and dark Castilian eyes, and our talk by the way led him, as our interest grew, to wax eloquent in the story of the Mission Fathers, for he was in a reminiscent mood and ours was receptive. He peopled our surroundings and the old streets of Monterey with the sea-booted, blustering mariner of old, the dark, copper-colored aboriginal, and the holy father who, with shaven crown and cowl thrown back, passed by in pious meditation—dim characters of the past, that walked again, and we read in the flash of his own dark eyes that ancestral pride of church and sire from old Castile.

His congregation is now a modern one, but still largely of Spanish extraction, and you see everywhere the olive-tinted complexion and long, dark eye-lashes that fringe the softening glance of fair señorita.

Approaching the church he pointed out the mosaic pavement, composed of whale vertebrae laid in geometric design, and the huge jaw-bones that ornament the garden, now forming trellis frames for roses and such climbing flowers to cling to. The place is full of these evidences of a once flourishing industry till the leviathans of ocean's depths were driven to more sequestered seas.

There go the ships! there is that leviathan whom thou hast made to play therein.

Occasionally they yet invade the bay and sport an hour away in clumsy aquatic frolic. The church and tower are on the outside, and are still colored a creamy white, the original wash given them by the Indian builders, who prepared the lasting materials in a slow and laborious manner. Quaint carvings, that are still sharp in outline, relieve the sameness of the walls in peculiar Mission style of partly Spanish and Indian conception, and all executed under the instruction of the early fathers. These priestly spiritual pioneers must have been men of considerable and diversified ability, who embraced, among their many accomplishments, the power of spiritual guidance regarding heavenly mansions and practical instructions in things temporal. While yet hearing God's call to their work, they accomplished it without the encumbering debts that their modern brethren accumulate. Verily, they built better than they knew! and we are indebted to them and their half-civilized co-workers for the services rendered to posterity and without hope of earthly reward and adulation. The Church of San Carlos is indebted to the munificence of Mrs. Leland Stanford, who has contributed largely to its renovation fund. She also erected, in 1891, the fine granite monument on the hill overlooking the spot that the early fathers landed on. Father Junipero Sierra is depicted life-size, stepping from his boat, cross in hand and in monkish garb. The statue, loat and granite waves are all cut from one block of gray material, which weighs more than forty tons. For 120 years this

historic spot was marked by a large wooden cross, planted by Portola and Junipero Sierra, June 3, 1770.

Another interesting event is to note the fact that the brigantine "Natalie," which carried Napoleon Bonaparte from the Isle of Elbe to France prior to the famous hundred days and the Battle of Waterloo, June, 1815, was wrecked in Monterey Bay, March, 1843. The wreck can still be seen at low tide and we secured a portion of her timbers.

In Joseph Schulte, Jr., the leading representative of our craft, we found a courteous friend. He has been here ten years, and finds business dull, which he attributes to the prevailing hard times, which has affected the crop of tourists on which the town mostly relies. Mr. Schulte is an ingenious mechanic, and has invented a patent automatic regulator for eight-day spring clocks. Both himself and his good Spanish wife are satisfied that their lot is cast in quaint old Monterey.

There are many delightful drives, both inland and coastward, that the visitors to the adjoining Hotel del Monte and Monterey can enjoy. The most famous is the seventeen-mile drive embracing Point Pinos Lighthouse, Pacific Grove, Cypress Point and Carmel Mission. Many are the encomiums regarding this charming excursion. Ex-President Harrison said, "There is nothing in the world to compare with it." Henry M. Stanley, the distinguished traveler, says, "The drives along the seashore are things to be remembered a lifetime." For our own part, while we are not so distinguished, we can voice the sentiments of our party, which found words inadequate to praise the varying attractions.

Starting from Monterey with a good luncheon aboard, we rounded the peninsula and soon were passing through the modern creation, Pacific Grove, which was originally started as a camping ground and place to hold the annual conference of the Methodist Episcopal Church, and is to the Pacific Coast what Ocean Grove is to the Atlantic cities, a seaside retreat free from the bane of seaside resorts, the disreputable and boisterous characters that ply their nefarious callings under every guise. Every coarse and unruly element is eliminated and no saloons are allowed, and so midnight carousing and dissipation are unknown.



Tree Cacti.

Fine residences and hotels abound, and in summer a city of canvas houses springs into existence, and thousands find renewed health and nerve in the soft saline atmosphere and peace and contentment in the soft sighing of the pines, waved by the gentle western breezes. Here is a climate balmier than Palermo or Nice, and the adjoining coast is the Riviera of California, the Italy of America, with more clear days and warmer winter temperature than the sunny Mediterranean shores can boast; and best of all, it is under American laws and customs (no reference to tariff).

We wind along our sinuous way through many a pine grove with their delightful aroma, till the coast is again reached at Point Joe. Here we stop for a moment at a Chinese fisherman's hut and examine his stock of beautiful abalone shells. An ugly celestial comes out of the hut and on our request, "Take your picture, John?" replies "Me wantee fifty cents," to which a companion kodaker replied. "D— his ugly picture, anyhow!" Our road from this promontory skirts the sea for several miles, and never had we seen Neptune in a wilder mood. Picturesque rocks jut out and dare the sea-king's ire, with intervening sandy beaches that lie submissive to his blows. Here and there are tangled rows of dark brown kelp, torn from the gardens of the sea and now marking in wavering lines the tidal limit of intrusion. Huge curling waves hurl and dash themselves in fearful fury against this seagirt strand, only to break again in wild disorder, defeated and undone, but not disheartened. Retreating with hissing sound to ocean's opaque depths, they renew the onslaught in ceaseless strife.

At Point Cypress we seek a sheltered spot beneath the cypress shades, with the far distant ocean for our horizon, and renew the inner man with appetizing morsel and native Zinfandel, and many a shell of nut is cracked, and some are chestnuts. Gentle reader, would you not like to share this mid-day meal in shades like these—this weird sylvan spot in nature's glades, with worldly care left miles away? For centuries these grim sentinels have stood faithful guard, their huge and gnarled trunks twisted and bent down with countless storms, and at their roots, fringing the rugged, sea-worn rocks, are curious indigenous plants, peculiar to

this place and fit companions for these sombre emblems of death. We scale the rocky promontories in sportive glee, forgetful of the dignity that becometh men, and are boys again—old boys. We peer into strange sea-carved caverns and cry with the Psalmist, "The sea is his and he made it," "Let the sea roar," and realize as never before the wonders of the deep. We reluctantly pass on and leave the fragments of our feast for sea-gulls' care, with the mental resolution that if Dame Fortune ever revives the bis., enough for us to glean a store, why, we will come again. Passing through beautiful fragrant groves that skirt the Midway Point, with the surging breakers dashing against their base in foamy turmoil, we turn inland for Carmel Mission, where we secure the key from the neighboring custodian and spend some time in quiet inspection of its interior and meditate on the sacred scenes these walls have witnessed in days gone by.

"Gloria in excelsis Deo, et in terra pax hominibus bonae voluntates."

Our excursion is now over, and we retrace our steps to Monterey, feeling that never was a day better spent nor more goodly company enjoyed. Next day we hurry northward to Frisco, having an opportunity of again enjoying the charming Santa Clara valley, and are soon en-route from Frisco to Los Angeles.

Tourists to Southern California seldom stop before reaching their destination, unless it is at Berendo, where the connection is made for Yosemite Valley and Big Trees of Mariposa. This latter excursion is an expensive one, about fifty dollars from Frisco, including stage. We deferred this for future exploration, when we hope to camp with rod and spear and kodak. We are again oblivious to the world and the flesh and pass in the night over Tehachapi Pass, to find, on awakening, that our horizon is bounded by the same dreary rocky scenes that we had encountered in Nevada, with the addition of a liberal sprinkling of Spanish bayonet and tree cacti, growing with their companions the greasewood and sagebrush. The former we found blooming profusely with their really beautiful plume-like flowers, and furnishing the only relief to the otherwise weary, monotonous scene. We are now skirting the famous Mojave Desert, and pass through Mojave, the depot for the dreaded Death Valley and its borax mines, between which (a distance of 165 miles) there are only three springs of water. The desert does not produce a mouthful of food of any kind, and for three months in the summer the heat is so great that no teaming can be done. It is not possible for either man or beast to withstand the terrific heat of this Mojave Desert, and the lower end of Death Valley (nearly 200 feet below sea level) is said to be the hottest place on earth. Many curious stories are told of this Upas depth, where the heat is so great that a man cannot go without water an hour without going mad, and the effects of the dry, arid air result in utter ruin to furniture and woodwork. In a very short time, a few days, chairs fall apart, tables warp into fantastic shapes, pails and water barrels, if left empty, drop to pieces; and the end of a blanket being washed will dry while the other end is manipulated in the tub. We refer our readers for further vivid and interesting descriptions of this desert country, its white Arabs, and for full information regarding that article of jewelers' use, borax, to "Sketches of Death Valley and other Borax Deserts," by John R. Spears (Rand, McNally & Co.)

Beautiful in situation, Los Angeles (City of Angels) stands, with its unique surroundings, the metropolis of a golden land, a modern miracle of man's advancement, a monument of success against adverse circumstances of nature. Never was a better exemplification of the saying that "God made the country and man made the cities." Her praises had been sung till we were expectant of great things, and were not disappointed with God's handiwork, for the climate is absolutely perfect in its soft warm radiance of golden sheen, but man's work is but the reproduction of its fellows—an American city with the modern appliances of business, a catalogue order, a twelfth of a dozen with gilt bowl and fancy engraved outskirts, with showy mansions on boulevard avenue adorned with tropical palm and floral attributes of the South, and embossed with church and public buildings. While willing to admit and admire its great success and future, we were disappointed, though perhaps without good reason, following



Native Trees.



Avenue in Los Angeles.

After that unique creation of California, San Jose, we had expected more than Nature's incubator could in man's case produce. Pray excuse the comparison. Los Angeles is here to stay in the front rank, however, and is the business center and supply house of the entire region of Southern California, and we had overlooked the very important and central location that she occupies. There must of a necessity be the rush, noise and turmoil of an American city, and we had pictured her as an invalid sanitarium amidst a wealth of modern palaces, charmingly placed in shade of pepper and eucalyptus trees, with grounds encircled with orange and palm, with cypress hedgerows, and redolent with the odor of flowers in endless profusion. And so we found it, but lacking the quiet serenity of her beauteous sisters.

Nothing can disturb this Queen City of the Angels, which eventually will become the capital of a new State and an arena for the political gladiator to win place and power and what-not. Being the hub of railroad radiation, she forms the destination of all tourists, whether in search of health, new homes, or investment, or on idle pleasure bent, and abounds with the evidences of the sickly ones' presence. Doctors of every school are here, regular or irregular, or masquerading in quackery's modern guise as "specialists," with their panacea for every human woe that flesh is heir to. Their companion satellites, the undertakers of death's sad rites, of grave and sombre countenance and fair round form, are here in numbers, plying their calling with a deftness that denotes no apprentice hand. The death rate is considerable among the Eastern invalids, brought here too often in vain endeavor to recuperate a wasting vitality, but the climate is not to blame. Every comfort and human care awaits the unfortunate ones, with every degree of heat and free from the sudden changes of temperature so fatal to the consumptive victim. To such a one we say, "Try it; it has cured others, may cure you, the natives use no other."

The population is now about 65,000, with a most excellent system of cable and electric transit. To mark her progress, please note that in 1880 she possessed only 11,000 inhabitants, and since that time has erected buildings to the value of \$20,000,000, including a court house, \$500,000, a city hall, \$200,000, and numerous fine and expensive blocks. A Public Library, containing 30,000 volumes, is maintained, and every form of modern entertainment and amusement can be found in her three theatres and numerous concert rooms. There are sixty places where watches are repaired, and others starting every day. Said one dealer: "The halt, the blind and the lame come out here, and when their money is gone and finding that the climate does not contain enough nutriment to sustain even a sickly existence, they have to do something and go to work. So business is overdone." We saw dry-goods Lox artists at work, soliciting small engraving jobs from the passers-by.

We acknowledge very courteous treatment from A. S. Joseph and F. M. Rieche, who tendered us all the favors and information in their power, and both deserve a good trade at the hands of a discriminating public. Montgomery Bros. have a very fine store and do a large business, as also does S. Nordlinger, in the finer class of goods; and several others make good displays, but it was impossible for us to see so many, and having obtained the desired local knowledge we departed to less familiar scenes than a jewelry store. They have their troubles, as elsewhere—slow trade and irresponsible competition, the cutting and slashing of prices without regard to the future bad effects. "Sufficient for the day" seems to be the motto—"Eat, drink and get there, for to-morrow we may die." Business is on a bed-rock basis; no boom or unnatural stimulus is now affecting the volume of trade.

Credit must be accorded to the railroad companies for the excellent arrangements which enable tourists to see the many points of attraction by means of the "kite-shaped track," by which, leaving Los Angeles, the visitor can make the complete circuit in a day, or stop over as desired. This iron figure eight includes about all the places the hurrying

tourist will have time to see. The chief points are Riverside, San Bernardino, Redlands, Arrowhead Springs, Santa Anita and Pasadena. The tourist can start in either direction. The "Orange Belt Express" goes by way of Pasadena, and the "Panorama Train" the opposite way, by Riverside. Choosing the latter, our first stop was at the citric capital, Riverside. Here we had an acquaintance with Frank Gilliland, an old Illinois jeweler, who, though not in our business, now resides here. We hereby testify to his great kindness and fraternal friendship, enabling us to see the chief attractions quickly and comfortably, for jewelers always know the good things. If we had the remotest chance of acquiring poetic fame, we would seek the inspiration amid such scenes as Riverside affords. Here the muse lurks in orange groves, to play a game of hide and seek with poets' tenderest chords, or, wafted on delicious odor-scented breeze in spirit form unseen, assails another sense. When Arcadi in sleeper wakes to life he seeks these elysian shades and plucks the luscious golden fruit that's pendant to his hand (five dollars fine for every orange). The poppy too, which zephyrs wafted here, was redder than Lancastrian rose, but, waking in these orange glades, took on their hue; and caterpillars (see that hump), ere their dormancy begins, resolve to burst from chrysalis folds with silken lemon wings.

Riverside lies at an altitude of 1000 feet and is surrounded by the spurs of neighboring mountain ranges. Its climate is dry and exactly suited to the cultivation of citric fruits. The pioneer settlers came in 1871, and at once began the construction of a vast system of irrigating canals and the planting of orange orchards. At that time they thought that no other part of California was suitable for culture of these fruits, but experience has shown that they will mature and thrive at many other places. The canals now irrigate no less than 25,000 acres and are constantly being extended. The source of supply, which we visited, is the Gage system, numbering fifty-five artesian wells, and is located in the spreading bed of the Santa Ana River, some miles away. To better understand these valleys, let the reader take a deep long dish and fill it half full with sand, with a slight raise at the edges. Then insert a few ridges of ragged



Irrigation Illustrated.

stones. Then imagine that the edges of the dish represent the mountain ranges around the valleys. Pour water on these edges and let it run down the sides till it fills the bottom of the dish under the sand. Then insert a pipe, and you have an artesian well and a fair idea of a Southern California valley. The supply is endless, and enduring as the everlasting hills themselves. They are sunk to the depth of 140 to 700 feet and are kept capped down when not in use, according to State law. Through the courtesy of the head engineer, W. Irving, who comes from Dumfries, Scotland, we were given an exhibition of their flow. The first well opened flows 5000 gallons per minute, and another well, he computed, supplied enough water for the consumption of a city of 40,000 inhabitants. When piped down to one inch, they will spout a jet one hundred feet high. The pipes put down are of ten inches diameter, and it is impossible to hurl into them a boulder the size of your fist—it bobs up serenely.

Mr. Miller, a local jeweler whom we visited, reads THE KEYSTONE, and it lay in orange-colored cover ready for perusal as opportunity offered. But we must say farewell to

"The land where the lemon-trees bloom,
Where the gold orange grows in the deep thickets' gloom,
Where a wind ever soft from the blue heavens blows,
And the groves are of laurel and myrtle and rose."

Our next stop was San Bernardino, where we changed for the upper loop and passed through Redlands, located in the upper foothill region of Santa Ana Valley, which has taken on growth since 1887. There are here 3500 acres in oranges, and it is the popular point for Eastern investors and settlers at present. The view of the San Bernardino Range across the valley is the finest conception of mountain grandeur that we met with. Continuing on through Highlands, another popular and beautiful place, located close to the base of the range, we are soon back again at San Bernardino, where we stop a few hours and look the town over. Here are the machine shops of the Southern Pacific Railroad, and it is the center of supply for the mountain mines and valley trade.

One jeweler here found it hard to believe our disinterested purpose, and finally asked what we had to sell and looked suspiciously at the kodak. This is the county seat of San Bernardino, which was, before Riverside County was taken off, the largest in the State and one of the three largest counties in the United States, possessing 13,550,000 acres. The place has about 4000 inhabitants.

Riverside lies hidden behind some spur ridges, and at Colton there is a rocky upheaval that is one entire mass of marble. The valley is not all ready for cultivation in its natural state; for miles and miles it is covered with cacti and sagebrush, and at places the dried-up beds of rivers that have once been streams from the mountains are covered with huge round water-washed boulders. With our limited knowledge of geology, we thought that these were the last places that the great waters ran when the mountains emerged from the great antediluvian sea. These boulders must have taken ages to acquire their rounded form.

Santa Anita is passed on the great Baldwin Ranch, and from this point a bridle path leads to Wilson's Peak (6000 feet). Then comes Pasadena with its own peculiar charms. The name signifies the Spanish Paso-de-Eden (Threshold of Eden), and is the crown of the San Gabriel Valley. Here is the famous Hotel Raymond, situated on a rising knob and commanding the loveliest vista of soft pastoral tranquility that mortal eyes ever drank to their fill. Its grounds are matchless in their floral acquirements. Here we saw flowers and shrubs that were entirely new and nameless in our floral vocabulary. Arriving on the piazza of the hotel by way of Orange Avenue, a street of wondrous beauty, we turn to catch the last sunset rays sinking in orange glory behind the flanking spurs of the San Gabriel Range. Peak behind peak, each softer and softer in hue, against a background sky which is a vaulted dome of magnificence, the golden radiance tinting the ethereal blue of the zenith till all color is lost in the webby mantle of night. Close by is the noted San Gabriel Mission, where oranges were first grown, and adjoining is Mount Lowe and beyond and upwards is Wilson's Peak.

Leaving Pasadena by rail you come to Altadena, and then by electric car you ascend the foothills until you reach the mouth of Rubio Cañon, a most romantic rocky crack in the mountains. Here you change again to the famous great Cable Incline Railway, which carries you up safely to the top of Echo Mountain, a sheer ascent of 1500 feet, and built and designed by Professor Lowe. Here are two hotels with every convenience and a post office and a small menagerie of wild mountain animals. By the aid of the patient burros you can continue the ascent of Mount Lowe and on to the summit of Wilson's snow-crowned Peak. The descent is more thrilling than the ascension, and many ladies have to close their eyes as the car tilts over the brow, held by a mere string in space.

We were indebted to genial friend Edwin F. Brown, jeweler, for local favors. He did not treat us as a "traveling man" or a tourist, and would have made our stay agreeable had we the time to sojourn longer. R. Collingwood and several others have attractive stores beyond the capacity of the place, and they rely somewhat on tourist trade, which is best here in winter.

Many men well known in the business world have residences here, and Green's Hotel is a beautiful creation of terra-cotta and cream colored-brick. This practically ended our visit, with the exception of a week on Catalina Isle, to the wonders of which a separate article will be devoted. In conclusion we would say, man's ingenuity is at its best here, and with nature's helping hand leaves little to be desired. Go and see for yourself, gentle reader; our task is done.

Adieu, ye vales, ye mountains, streams and groves,
Whose vines a shadow to the roses yield.



Hotel Raymond.

Jack-Knives.

LXXXV.

LET us next continue the problem of how to arrange our spacing apparatus for cutting gear wheels. As the arrangement was left at the close of our last article, if we arrange some way to turn the worm *B* (see page 868, November, 1894, KEYSTONE) just one revolution, it would move the wheel *A* one tooth or 192d part of a revolution, and a wheel placed on any of the devices we have already described for holding wheels to be cut, we could cut 192 teeth. If we gave the worm *B* two revolutions, we would cut a wheel with half the number of teeth as in the wheel *A*, or ninety-six teeth. If we give the worm three revolutions between each cut, we would produce a wheel with one-third the number of teeth, or sixty-four. All such combinations will readily suggest themselves to the reader.

Now let us investigate and see what we can do in the way of cutting wheels which are not even divisors of 192. But before we go further we will add another part to our device. To make matters better understood, we reproduce all the important parts of Fig. 2 of November, 1894, cut, at Fig. 1 of the present number. The part to be added is shown in position by the dotted outline at *D*, Fig. 1, and also enlarged at Figs. 2, 3 and 4; Fig. 2 being as if seen in the direction of the arrow *c*, Fig. 1. The part added consists of a disk of heavy sheet brass provided with a socket *E*, which is fitted to the arbor *b*. The object of this socket is to insure the disk or wheel *D* running true in the flat. This disk should be about 2½" in diameter, and through it we drill holes, as shown at *e*, Figs. 2 and 3.

It will be seen that in Fig. 2 there are four and in Fig. 3 three holes. The object of these holes we will now explain. It is to be understood that the disk *D* runs as close as possible to the top of the frame *C*, which holds the worm screw *B*, in order that the stoppage by the pin *d*, Figs. 1, 2 and 4, may be as positive as possible. Let us now see what we can do in the way of divisions for cutting wheel by the aid of our newly added disk. It is well to say that this disk is equivalent to multiplying the 192 teeth of the wheel *A* by four; and if we wished to cut a wheel with 768 teeth, we would turn the disk *D* just one-fourth of a revolution.

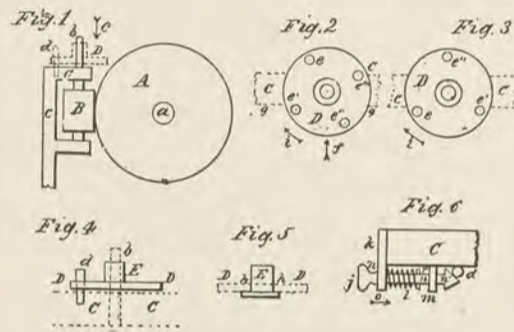
For illustration, suppose we had cut the first tooth and the stopping pin *d* rested in the hole *e'*, Fig. 2, and said pin was pressed against the frame *C*. We change the pin *d* to the hole *e''* and turn *D* until the pin *d* again rests against the frame *C*, when another tooth can be cut. It will be seen that any number (of teeth) which will divide 768 without a remainder can be cut. Suppose, for instance, we wish to cut a wheel of 128 teeth; we see if this number will divide 768 without a remainder and find it goes six times, consequently if we turn *D* six spaces we will cut our wheel all right. To do this, suppose the pin *d* stands in the hole *e'*, Fig. 2. We turn the disk *D* one full revolution and two extra holes.

In practice, the safest plan is to first make a full revolution of the disk *D* and then add the two holes, bringing the pin *d* firm against *C*. To add to the scope of our wheel-cutting device, we divide another disk *D* into three holes, as shown

at Fig. 3. Such a disk gives us 576 divisions and furnishes us with means for cutting wheels which are multiples of three. As for instance, suppose we wish to cut a wheel of seventy-two teeth. We divide 576 by seventy-two and find that eight of the spaces on the disk of three divisions will answer our purpose, that is, we give the disk two full revolutions and add two hole spaces, that is, counting from the hole the pin was in.

To explain, let us suppose we have just cut a tooth, and the pin *d* stands in the hole *e*, Fig. 3. To set the lathe spindle for the next cut, we give the disk *D* two revolutions, counting from the hole *e* where the pin stands, and when the disk has made the two full revolutions, shift the pin forward two holes and bring it (the pin) around to rest against the frame *C*. For increasing the capacity of our wheel-cutting device, we add two more disks, one having five and the other seven holes. With four such disks we can cut almost any number of teeth we desire. Of course such wheel-cutting requires very careful counting to avoid mistakes, but where we have only a wheel or two to cut it will not take very long to do it.

If we have many wheels to cut of a given number of teeth, it is well to cut one and use this for division purposes. It may not be amiss to say



that it is not well to put several divisions like *D*, Figs. 2 and 3, on the same disk; but we can save ourselves some work by making the socket *E* separable, as shown in Fig. 5, where *E* shows such socket and the dotted lines at *D* the disk. The parts *E D* are united at *h* by small screws. We can add to the disk *D* already mentioned 11, 13, 17 and 19. If there should be any fears entertained of the division disks *D* getting displaced by accident, a spring latch can be made, as shown in Fig. 6, which is a magnified view of a portion of the frame *C*, Fig. 1, seen in the direction of the arrow *c*. The latch consists of a bolt *n*, supported by the guides *k m*, which are attached to the frame *C*. The idea of the bolt *n* is, it is pressed forward by means of the light spiral spring *l* until the button *j* strikes the guide *k*. The end *n'* of the bolt *n* is V-shaped, and when the pin *d*, Fig. 4, strikes it, it falls back and allows *d* to assume the position in Fig. 6, that is, *d* resting against *C* and safely locked.

OAK HILL, FLA., November 14, 1894.

PUBLISHER KEYSTONE.

DEAR SIR:—I am just in receipt of THE KEYSTONE for November, and must say it is one of the finest-appearing numbers you have yet sent out. It is a work of art that might well be studied by every job printer in the land.

Yours very truly,

E. S. COUTANT.

SUCCESSFUL advertising is not so much the result of art as experience. A college graduate might write a good advertisement, but he would not know much about putting it where it would "pull." When a man harnesses up art and experience together and hitches them to a commercial chariot, he has a "turn out," as we used to say, that is likely to take the blue ribbon.

—Ram's Horn.



The local factories are fairly busy, though the aggregate output for the season will fall far below the average of some years previous to '93. There is confidence in the future, however, and building operations and extensions show sanguine anticipations as to the remunerativeness of '95. Those well versed in business philosophy seem just as well pleased that the improvement is gradual, as they are inclined to discount the permanency of prosperity ushered in by a boom. The artistic merit and originality of the designs in jewelry are remarkable features of this season's product.

Nathan B. Barton, of Ostby & Barton Co., Providence, has been appointed a member of the finance committee of the Rhode Island Business Men's Association.

Parks Bros. & Rogers are to have elegant quarters in the new Kent & Stanley Building, Providence.

The members of the Manufacturing Jewelers' Board of Trade will hold their regular annual meeting on the third Saturday of this month.

Henry C. Tilden, son of Henry Tilden of the Tilden-Thurber Co., was married recently to Miss Flora B. Steiness, daughter of Justice John H. Steiness, Judge of the Rhode Island Supreme Court.

The North Attleboroans are contemplating changing the name of their town. Among the names suggested is that of Willett, in honor of Thomas Willett, the founder of old Attleboro, and subsequently the first mayor of the city of New York. Some confusion in the matter of the delivery of mail and freight is said to make the change desirable.

George C. McCormick & Co., of Providence, are succeeded by The McCormick Company. The incorporators are George C. McCormick, Dean Southworth, Walter S. Gardner and others. The officers of the new corporation are Dean Southworth, president; Walter S. Gardner, secretary; and George C. McCormick, treasurer. The capital stock is named at \$50,000.

That Foster & Bailey, Providence, have a rarely accurate conception of the meaning of purse-opening as applied to holiday goods, will appear from an inspection of their product for this season. Their manicure sets and other articles of utility—and necessity—are attractive almost to the point of fascination, and are certain to stimulate the liberality of the gift-purchaser. As holiday specialties they have rare commendations.

A recent fire in the third floor of the Ostby & Barton Co. factory, in Providence, burned out the belting and broke considerable glass. The delay, however, to the factory's operations was only temporary. There was no delay in shipping goods, as the stone ring department, located on that floor, was temporarily continued on the other floor.

The new Kent & Stanley Co. building, Providence, which is in a practically finished condition, was formally opened for the first time to the public on November 8th.

C. E. Sandland, of North Attleboro, has opened a branch enameling shop at 35 Potter Street, Providence.

The will of Robert F. Simmons has been admitted to probate. J. L. Sweet, E. R. Price and G. A. Adams have been appointed executors.

The employees of Kent & Stanley Company have organized a literary and social club, the officers being as follows: President, Eugene Adams; treasurer, Michael O'Brien; secretary, James H. Galvin.

Irons & Russell, Providence, have just distributed their big 1895 emblem catalogue. It has 250 pages, is bound in cloth, and contains nearly 3,000 illustrations. They have also sent to the trade a vest-pocket price-list of 75 pages.

The Attleboro Agricultural Association passed the following resolutions of regret at the death of R. F. Simmons, who during life was prominently identified with the Association:

WHEREAS, The circle of our official board has been broken by the death of R. F. Simmons, duty and inclination prompt an acknowledgment of our loss, and of his worth, therefore be it resolved that by his death the Association has lost a good friend and a useful member, one who as president and director, so long as his health permitted, gave his services freely, his wise counsel and personal influence.

Resolved, That we mourn him as a man and a citizen, and shall ever hold him in grateful remembrance.

Resolved, That these resolutions be spread upon the records as a slight token of our high regard for him.

S. O. BIGNEY, President.
GEO. RANDALL, Secretary.

{ FALCON HARBOR, BOWDOIN BAY,
{ NORTH GREENLAND, Aug. 16, 1893.

GENERAL MANAGER CARR,
THE E. HOWARD WATCH CO.,
383 Washington Street, Boston, Mass.:

DEAR SIR—It gives me much pleasure to acknowledge receipt of your three movements inclosed in aluminum cases as suggested by me. The three movements of your make which I used on the last year's trip to the northern extremity of Greenland enabled me to return to the point of my departure, on the shore of McCormick's Bay, after a trip of some 1,300 miles, with a deviation of a trifle less than five miles. In the more compact and convenient form for the movements for the coming expedition I anticipate equally good results.

The fact that I take your movements again is, I think, the strongest proof of my belief in them. I am,

Very sincerely yours,



Civil Engineer, U. S. N.,
Comd'g Expedition.



LIEUT. PEARY will undoubtedly reach the North Pole, depending upon his Howard Watches to locate it.

ESTABLISHED 1842

Samuel Little, Pres't

Rufus B. Carr, Gen'l Man'gr

Arthur M. Little, Treas'r



OFFICE OF
THE E. HOWARD WATCH & CLOCK CO.
FINE WATCHES & CLOCKS
383 WASHINGTON ST., BOSTON 34 WASHINGTON ST., CHICAGO.
E.V. CLERGUE, Agent.
41 MAIDEN LANE, NEW YORK.
New York!

RETAIL JEWELERS,

GENTLEMEN--WE HAVE RECEIVED many letters from THE TRADE throughout the country from which we judge that an ERRONEOUS IMPRESSION has been given that HOWARD WATCHES cannot be obtained from Jobbers.

We therefore take this method of informing our friends, the Retail Jewelers, that any legitimate Jobber in the country can supply Howard Watches of ANY GRADE OR SIZE desired.

If your Jobber fails for any reason to fill your orders, write directly to us and we will see that you are supplied.

We have also received complaints that Retailers fail to get satisfaction when they send Howard Watches to their Jobbers for repairs, &c., and we earnestly request that any Retailer having trouble of any kind in regard to the PURCHASE, SALE or REPAIRING of our Watches, communicate directly with us.

We will gladly correspond with any dealer upon any point in connection with Howard Watches or Clocks.

The American Watch is the best watch in the world and WE HAVE ALWAYS MADE, ARE MAKING and WILL MAKE the finest American Watch.

We have a thoroughly organized repair department and will now do repair work on Howards at ACTUAL COST.

THE E. HOWARD WATCH AND CLOCK CO.

Robert B. Tolles, Optician.

The stride made in recent years by the science of optics and the manufacture of optical instruments, makes peculiarly interesting the following sketch of the life of Robert B. Tolles, in his day the most skillful optician in the world. For the sketch we are indebted to W. Bohne, of New Orleans, a distinguished optician of our own time.

Robert B. Tolles (1823-'83) was born in Winsted, Conn. His father, Elisha Tolles, a farmer, spent a good deal of his time with mechanical inventions, several of which he patented; but, like many inventors, was lacking in business ability, and never received much pecuniary benefit from them. His youthful son, Robert, was his diligent assistant, and early showed a decided inclination for all kinds of mechanical work. He made, while attending school, a very good violin on which he played for years. At the age of twenty-one, without knowing a particular trade, he was thrown upon his own resources with three sisters younger than he looking to him for support. In his helplessness he went to an uncle in western New York, but, disappointed in his expectation of assistance, he by chance stopped at Canastota, and visited the shop of Chas. A. Spencer, where he found employment. We sometimes speak of a lucky accident, but in this case we rather should call it a beneficent providence, which enabled a master mechanic to detect at once the embryonic genius in the rough exterior of the young country boy. Under the direction of such a teacher he developed phenomenally his mechanical gifts, and soon was able to execute the great ideas of his older friend. Many of Spencer's great achievements, later on, were due to the skill of Tolles. But when Spencer gradually enlarged his business, and associated himself with A. K. Eaton, for the manufacture of telescopes, Tolles concluded to start for himself, and limit his skill exclusively to the manufacture of microscopes. He rented a room in the railroad station, which served him as workshop and bedroom. Here he worked to his utmost capacity, sometimes twenty hours out of twenty-four, including Sundays and holidays. Orders flocked in from near and far. Meanwhile, the association between Spencer and Eaton had proved unprofitable; Eaton withdrew and left Spencer in a crippled condition. The old shop was breaking up, and most workmen went over to Tolles, who now rented the upper floor of an unused barn. Among these workmen were John Green, Austin Glidden and James Morrison, as glass-workmen; and Chas. H. Dalton, Orlando Ames, Clarence the son of Spencer, and O. T. May (Spencer's son-in-law), as brass-workmen. In 1867 he moved to Boston, and established the "Boston Optical Works," under the patronage of several prominent merchants and manufacturers.

Tolles liked his occupation from the first day; it was most truly a case of love at first sight, and was verily a love that grew stronger and stronger as time went on and the possibilities in the field of optics opened up before him, until it took complete possession of him to the exclusion of everything else. And to the end that he might achieve the best possible results in the line of his work, no man ever labored more devotedly or found greater satisfaction in the doing of his work than did he. But the story of his life has also its dark side, and only a few of the many who enjoyed and profited by the fruit of his labor were aware of it. For more than twenty-five years, and while he was doing his best work, he labored constantly under the great disadvantage of very poor

health, and many a time he was at work in his shop when most men would have taken a rest. In his younger days he had a severe attack of pleurisy which left a painful sensation in his side, aggravated always by the least cold or indisposition. Add to this the disadvantage, which many times proves quite as fatal to genius, of being poor—at times without the requisite means with which to prosecute his work under conditions that would insure the best results from his inventions and discoveries, and we must admit that he was a martyr to his trade. He was poor all his life, and when he died in the hospital, he had no decent suit of his own to be buried in. The cause of his poverty was partly due to his poor judgment in money affairs. For instance, one day he received nine hundred dollars for work delivered, and as he generally was in debt, he paid out every cent, not leaving himself enough to pay for his dinner the next day.

The relation between Spencer and Tolles was always a friendly one; even when Tolles was at the head of a large shop, he took his work to his former teacher for examination and



ROBERT B. TOLLES.

suggestions as to its quality and improvement. Spencer helped him in various ways; he aided him to get his patent on the binocular eyepiece, and assisted him enough on his solid eyepiece to give Spencer the right to use it. *Only great men act in that way.* Tolles was not a scientific optician like Spencer and Zentmayer; he was not accustomed to figure out his formulæ with pencil and paper, but he got the greatest results by experimenting and by his unsurpassed mechanical skill. His greatest achievement was the $\frac{1}{8}$ objective, somewhere about 1874, the only one in the world, and at present in the possession of Dr. E. Cutter, of New York.

Tolles' education was somewhat neglected. He therefore took to reading, and soon acquired a general knowledge of the arts and sciences as well as of the writings of the poets and select writers. He was very reserved and modest, and no one could vex him more than to mention any of his merits in his presence. He abhorred noisy company; it disgusted him, and he did not hesitate for a moment to show his dislike. He was well known in London and Paris, and received the degree of A. B. from Colby University, of Maine. In 1872 he had a lively controversy with F. H. Wenham, an optician of London, about the measurement of the angle of microscopic objectives, which was published in *The Microscopical Journal*, of London, and in *The Boston Journal of Chemistry*.

He died in Boston, November 17, 1883, and was buried in Mount Auburn Cemetery. The sad news spread rapidly, and three days later Dr.

Geo. E. Blackham, of Dunkirk, N. Y., wrote the following beautiful eulogy to an intimate friend of Tolles: "I have just heard in a letter from Mr. Ed. Bausch, of Rochester, of the death of my good friend Tolles. I need hardly say to you how much this sad news has grieved me. The loss to microscopy throughout the civilized world is simply irreparable, but to those who had the happiness to be counted among his personal friends, there is something more than the mere 'eclipse of a great light in optical science. His lofty character, his frankness, his honesty, his modesty and dislike for anything that savored in the least of boastfulness, his peculiar reserve and the warmth of his friendship, when once the ice was broken, endeared him to his friends as much as his marvelous genius and the unsurpassed skill in devising and constructing new optical combinations distinguished him in the world of applied optics. To the scientific world at large, he will live as the man who dared to attempt what the accepted authorities had declared to be impossible; as the man who not only dared to attempt, but succeeded in turning 'the 180° corner'; as the rare combination of artisan, artist and scientist, whose work was not made to sell only, but who, ever striving to surpass himself, wrought each new objective as if it were his only one, putting into each a portion of his own individuality, and making a work of art rather than an article of commerce. But to us who knew him more intimately, he will live as the shy, reserved, but warm-hearted man of genius. Standing at the very pinnacle of his profession, his death leaves a vacancy not readily filled."

The Microscopical Society of Illinois also passed resolutions of sympathy with his family. But these slips of paper form the only monument to his memory. The American opticians and microscopists have, to the present day, neglected to mark for future generations the spots where the remains of the greatest opticians of the world were laid to rest; *neither Tolles' nor Spencer's grave shows any kind of lasting remembrances.*

"You have no strings to me, but I want one tied to *The Keystone* sufficient to draw it all the way from Philadelphia, Pa., to our little town of Collins, Mo."—R. W. Pitts, jeweler, Collins, Missouri.

Advertising Spice.

They sell most who advertise most.

A true advertisement is the echo of actions behind the counter.

Every clerk in your store should echo in actions and words the ring of your advertisements.

Curiosity is the key-hole through which many an advertiser pokes his argument into the public mind.

Advertising to a well-stocked store, like rain to a thirsty plant, enlivens and leaves "silver drops" all around.

A catchy advertisement in an evening paper is like a rainbow in the east. It is a bright pledge of to-morrow's business sunshine.

As a stiff breeze sweepeth the clouds from the sky, so brisk advertising sweepeth cobwebs from the hustling merchant's store.

A long-winded ad. containing little reason, like a bin of chaff with a few scattered grains, is not worth the trouble of looking over.

The brightest and most original advertisers of the day are not necessarily so because they advance new methods, but simply because they know how to say their say as if it had never been said before.

—Printers' Ink.

"SOME day," said the morose man, "I am going to write a book. I am going to make a record of my wasted opportunities; a compilation of the things I should have done and didn't do."

"What will its title be?"

"H'm'm. I hadn't thought of that. I guess I'll call it my ought-to biography."

—Washington Star.



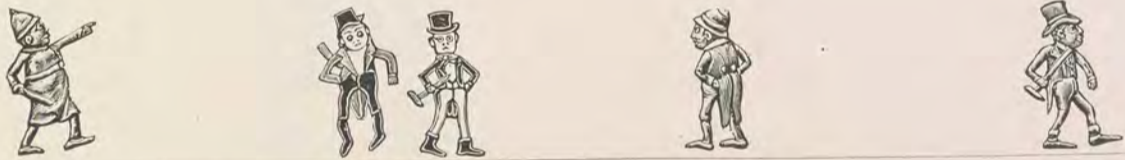
R., L. & M. FRIEDLANDER

WHOLESALE JEWELERS

30 Maiden Lane, New York



JEWELRY



If you wish to see the newest goods, send for all or any of the following:



Monarch Catalogue, No. 50: devoted to Watches, Diamonds and Jewelry.

Monarch Watch Catalogue, No. 51: devoted to Watches exclusively. This is the most up-to-date catalogue published, and contains illustrations of the latest products of the most prominent manufacturers. It is corrected up to Nov. 1, 1894.

Monarch Catalogue, No. 27: devoted to Tools, Material and Optical Goods. Have you seen it?



In writing for above, be sure to mail your business card or references.



American Lathes and Their Attachments.



L.

THE cutter arbor we described in our November issue is mounted in the swing frame, or carrier, described and illustrated on page 776, of October, 1894, KEYSTONE. We reproduce a portion of Fig. 4 of that date, at Fig. 2 of our present issue, to better explain how the rotary cutter is mounted. Fig. 1 is an edge view of Fig. 2 seen in the direction of the arrow *a*. The bearings of the cutter arbor run half in the lugs *D'* and half in boxes *N*, screwed on to *D*, as shown in Fig. 2. To control the end-shake of the cutter arbor *B*, two end caps are secured to the lugs *D D'*, as shown at *C C'*, Fig. 2. These end caps could be made adjustable, but if properly fitted when made, any wear will change them but little.

How Rigidity to the Cutter Arbor is Obtained

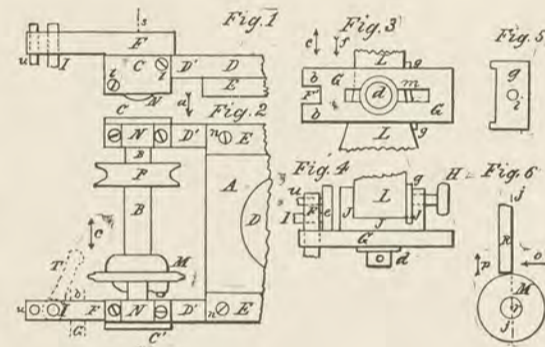
To secure rigidity to the swing frame which carries the cutter arbor, we attach to the lower lug *D'* the projection *F*, as shown. This projection passes into the slot *F'* in the bar *G*, Fig. 3. The clamp *J*, Fig. 4, is made of wrought iron, or better, of steel, as it is important the bar *G* should be rigid. To give a clear idea of the parts shown in Figs. 3 and 4, we would say that in Fig. 3 the part *L* represents a portion of the headstock of an American lathe, seen in the direction of its axis, and the part *G*, the bar we have been describing as a support through *F*, for the swing carrier frame. The clamp *J*, which is shown in Fig. 4, is as if seen in the direction of the arrow *f*, Fig. 3, but the parts *e J H* are not visible in Fig. 3, as the bar *G* hides all back of it. The reader can understand that the strong clamp *J* grasps the waist of the headstock, and the screw *d* secures the bar *G* to it. For those who would not object to drilling the headstock to their lathe, we would say, the screw *d* could be tapped directly into it, and do away with the clamp *J* and screw *H*. We would add here, that to prevent the screw *H* from marring the lathe, a piece of sheet brass, shaped as shown at *g*, Fig. 5, can be placed between it and the lathe, as shown at *g*, Fig. 4. The bar *G'* is adjustable to and from the lathe center, in order to adapt the machine to cutting wheels of different sizes. This is done by the screw *d* moving along the slot *n*. To accomplish this to the best advantage, the better way is to make the screw *d* so it turns by holes drilled in the head, at right angles to its axis.

The piece *F*, Fig. 2, fits nicely into the slot *F'*, Fig. 3, without side-shake. It will be noticed in Fig. 4 that there is a projection *e*, which extends back from the bar *G*. The object of this is to furnish rest for the screws *I m*. The screw *I* is for graduating the feed when cutting teeth, and the screw *m* stops the advance of the cutter at the proper depth. Making the piece *e* of some length allows a movement of the part *D* in the direction of the axis of the lathe. The object of this movement is to enable us to cut thick wheels and pinions so the acting surfaces will be parallel to the axis of the mobile. Perhaps it may not be out of place to explain: With an ordinary rounding-up tool used, say, on the teeth of a Swiss main wheel, we can readily see the cut is concave and conforms to the convexity of the *fraise* or cutter, but if we give the cutter a slight forward feed, in the direc-

tion of the axis of the lathe, a straight cut is made and such concavity disappears.

For clock wheels or pinions, such movement, parallel with the axis of the lathe, is absolutely necessary. When we have the pulley *P*, Fig. 2, driven by a countershaft, we have no difficulty in working, and in cutting a tooth we first set the division wheel so the cut will be in the right place, then by means of the screw *J*, Fig. 4, October, 1894, KEYSTONE (page 776), we move the cutter until it stands opposite the wheel to be cut. Then by means of the screw *I* and crank *T*, of the present number, commence to retract the screw *I* until the cutter attacks the wheel to be cut; we continue to gradually draw back the screw *I* until the tooth is of the desired depth, and then set the stop-screw *m* so the cutter will go no deeper. Next we move the cutter forward, as described above, to make a straight cut.

The diagram at Fig. 6 illustrates the process. The cutter is first set so the center comes opposite the outer face of the wheel, or on the line *j*; the cutter is next fed in to cut the proper depth of tooth, and then stopped by the screw *m*. The cutter is then fed forward in the direction of the arrow *o* to cut the surfaces straight. Where a bow



is used to drive the pulley *P*, we cannot employ both hands to work the feed screws. In this case about the best plan is to attach a cord to the swing carrier, which will constantly draw the cutter toward the work.

Of course on turning the crank *N* in the right direction, the screw *I* will pull the cutter *M* back from the work while we shift the index, then on retracting the screw *I* the cutter will advance and cut another tooth. In this way we work both the feed screws with one hand, while we drive the bow with the other. Let us suppose the dotted line *s*, Fig. 1, to be a cord passing over a pulley, and to said cord a weight was suspended; this weight would constantly keep the swing carrier urged forward for cutting. Or we could substitute a spiral spring, one end of which was attached to the cord *s*, and the other to a stud in the bench. About the best way to work the bow is standing beside the lathe, with the right arm over it, and the elbow back, letting the gut cord of the bow pass obliquely across the lathe bed.

"The Keystone is far in the lead of all the trade journals. I have become very much attached to it. Every line is interesting."—H. L. Lang, jeweler, Staunton, Virginia.

A YEARLY advertisement of one column in the Chicago Tribune is \$35,000; in the New York Tribune, \$29,544 for the lowest and \$148,000 for the highest-priced columns. These figures will doubtless be of interest to the man who invests ten dollars and flatters himself with the idea that he is an extremely liberal advertiser.

MAKE your mistakes teach you something. There is something wrong with the man's head who falls down on the same banana skin twice. —Ram's Horn.



Hold on

till we call over our monthly roll of new things. There's

The Marguerite Watch Case

A new pattern of Jas. Boss 14 K. filled case, with beautiful repoussé work ornamentation, similar to that seen on the finest gold and silver ware, but new as adapted to watch cases.

The Orlando Watch Case

A new pattern of Jas. Boss 14 K. filled case, with wide chased border in connection with a beautiful hand-engraved center. The contrast is remarkably pretty and the composite pattern imposingly artistic.

The Rosalind Watch Case

A new pattern of Jas. Boss 14 K. filled case, in 6 and 8 sizes, with chased center and border, a new-shaped back, and exceptionally fine hand-engraving.

The NEW Silveroid Case

This new case opens easily, has a rounded rim instead of a finger-cutting edge, and is much smaller than the clumsily sized old-style nickel cases.

The Silveroid Case

with Vermicelli Border.—This pretty case is cheapness idealized, as it is raised by art to a level with expensiveness, and is proportionately profitable to the seller of the goods.

The Bourbon, the Hiawatha and the Minne-ha-ha, all Jas. Boss 14 K. filled, and the plain full bascine Jas. Boss 14 K. filled, are already perched in the citadel of popular favor—a unique three months' achievement.

Keystone Watch Case Co.

Boss Cases



Elgin Movements



**H. O. Hurlburt
& Sons**
938 Market Street
Philadelphia, Pa.

A Selling Novelty 960 a

Small Cups and Saucers, with Sterling Silver Spoon,
that can be retailed complete, with ribbon, for **\$1.00**



Our price to the Jewelry Trade, **\$8.00** per dozen,
in full dozen lots.

Send \$8.00 with order to save time.
Cups and Saucers are assorted styles and decorations.

LEVY, DREYFUS & CO.

9 and 11 Maiden Lane, NEW YORK

\$50.00 will buy an opening stock of **Porcelain Novelties**.
Order promptly to get them in time for Christmas trade. Selection may
safely be left to us. Send money with order if we do not know you.

A Pointer

for all who would
become Skillful
and Successful
Watchmakers,
Engravers or
Opticians.



The
Waltham Horological School

is the oldest and has the best equipment
and instructors.

Thorough instruction given in **Horology, Engraving
and Ophthalmology**. Graduates are often sent to respon-
sible and good-paying situations.

Every pupil has the privilege of making a watch while
here, and owning it when finished, without extra cost.

Palmer & Swain, Proprietors,
Waltham, Mass.

Write for our New Prospectus.

WE TRY TO TREAT
YOU BETTER
THAN ANYBODY ELSE
DOES.

Stein & Ellbogen Company

DIAMOND IMPORTERS
AND
DIAMOND CUTTERS

WHOLESALE DEALERS IN EVERYTHING NEEDED BY JEWELERS

COLUMBUS
MEMORIAL BUILDING
CHICAGO

WE SOLICIT YOUR DECEMBER MAIL ORDERS,
AND PROMISE THEM MOST CAREFUL
AND PROMPT ATTENTION

Among the Trade.

Alabama.

A. Murray, of the firm of Murray & Smith, Huntsville, was among the Southern buyers in New York last month, purchasing fall novelties.

The Birmingham Jewelry Company, W. C. Abbott, manager, has opened an establishment on Second Avenue, Birmingham.

California.

Dupre & Lind have opened a jewelry store in San Luis Obispo.

Peter Hay has succeeded Thomas Yost & Son at 1013 J Street, Fresno.

H. Hauschildt, Hayward, is making extensive improvements in his store.

Jeweler E. B. Chambers, Santa Barbara, has recently completed the erection of a beautiful residence.

H. M. Funk, formerly a clerk with M. German, in San Diego, has opened a store of his own in that city.

F. W. Carter, San Luis Obispo, has moved into a fine corner store with larger and better quarters than of old.

R. H. Witheril, Redondo, was elected a justice of the peace on the Republican ticket—a well-deserved honor.

M. Lessner has opened a jewelry and optical establishment at the corner of Thirteenth Street and Broadway, Oakland.

Whiley & Clock have bought out C. C. Hooper, Los Angeles. Mr. Clock was formerly of Funk & Clock, Seattle, Wash.

H. C. Warner, Fresno, has moved into the store formerly occupied by Bangle & Hansen, who removed to Tacoma, Wash.

George W. Collis, who was for a number of years with Platt & Harris, Los Angeles, has opened a store for himself at 58 East Colorado Street, Pasadena.

The neatly arranged combined store of W. J. Pierce & Co., jewelers, and J. S. Glasscock, stationer, was opened in Pasadena, last month. Pierce is from San Francisco, where he has had twelve years' experience as a manufacturing jeweler.

Business in the jewelry line is reported fair, with prospects good, at Los Angeles. The winter tourist season begins this month, and the months of December, January, February and March will find thousands of wealthy Easterners there, who buy many souvenirs and otherwise make themselves useful in general to the trade.

The post office authorities on this coast have taken decided action against watch clubs. They have notified a number of jewelry stores in Los Angeles who have been violating the law, against using the mails for lottery purposes. It is claimed that the prime cause for moving against this class of trade is that a number of unscrupulous adventurers, throughout the State, have been using the club plan in working up suit clubs, and that in a number of instances the patrons have been swindled by the club breaking up before the last man got out. The postal authorities were asked not to allow the mails to be used for such purposes, and they decided that in order to stop the suit club men, they would have to stop all persons from working this kind of scheme, including the watch club jewelers.

The city council of San Diego recently adopted an ordinance providing that auctioneers of jewelry shall be charged \$15.00 a day. The mayor has vetoed the bill. He says: "My objections are that it is unjust, discriminating and unequal, in that were it to become a law, a person could open a jewelry store in competition with an old-established and permanent firm, by paying a license of only \$50.00 for six months, and yet if one of our established jewelers should want to hold a Christmas auction sale, he would have to pay into the city treasury the sum of \$2,730 before he could sell at auction a nickel watch, for the proposed ordinance requires that to sell jewelry, watches and plated ware at auction a person must pay \$15.00 a day, payable semi-annually in advance, which means that \$2,730 would have to be paid into the city treasury before he could sell at auction a single dollar's worth of his goods."

Colorado.

The Ford Optical Company, of Denver, successors to C. E. Ford, oculist, are now occupying a fine store. They have recently added a stock of photographic supplies.

Jeweler I. O. Glazier, of Greeley, is gaining an enviable reputation as a scientific optician, and is quite an enthusiast in this line. He reports general business as fair.

Joslin & Park, of Denver, say their trade has increased twenty per cent. since the election. They think prospects are excellent for a good holiday trade. Returning confi-

dence among leading men, upon the satisfactory result of the late election, has brought it all about.

G. E. Jacobs, the Denver optician, is doing a fine trade with a large and increased stock.

General business has greatly improved in Denver, as well as all over the State, since the election. The result seems to give universal satisfaction to the business public.

Mrs. F. J. Wood, Georgetown, successor to the business of the late F. J. Wood, who died on Nov. 15th, wishes to announce that until the administration of the affairs of the estate is concluded, the business will be conducted in her name without any other change. All indebtedness will be adjusted by her as the sums fall due.

Connecticut.

W. A. Schroeter, formerly of 198 Grand Street, New York City, watch repairer for the trade, has removed to Westport, this State. Mr. Schroeter himself will attend to the repair department, while Mr. Laherty will have charge of the watch and clock department.

Charles Teske, Hartford, has been appointed a watch inspector of the Philadelphia, Reading and New England Railroad Company. Among certificates as to his ability in his line he has received one from C. M. Lawler, general manager of the Philadelphia, Reading and New England Railroad Company.

The Dakotas.

Emil T. Steinhaus, a watchmaker, has opened a store in White, S. Dak.

D. B. Strait has purchased an interest in the store of Olaus Thorsrud, Eureka, S. Dak., and the firm name is now Thorsrud & Strait.

W. J. Keating, of Watertown, S. Dak., has been disposing of his stock with a view to leaving that town for a new home somewhere, probably Fargo.

Florida.

H. E. Adams, of Sanford, has recently returned from a purchasing trip to New York.

E. K. Shaw is the new jeweler at Crescent City. He opened up a store in the Cowles Building early in last month. Mr. Shaw hails from Kansas.

George Suhrer, of Fernandina, has recently made extensive alterations in the front of his store, which has added much to the appearance of his establishment. He can now brag of one of the handsomest show windows in town.

Illinois.

W. W. Scudder has opened a jewelry store in Decatur. Charles Stiller, of Lemont, has purchased the stock of F. Overstreet, of Farmer City.

R. G. Fowler, Olney, has moved to elegant new quarters in a recently completed brick block.

A. Lyon, of Russell & Lyon, Jacksonville, was buying holiday novelties in New York early in last month.

G. W. Hamilton has purchased the business of Lyon & Kylling, of Danville, and will continue the business on an increased scale.

Benj. V. Means, for many years a well-known watchmaker at Quincy, later at St. Joseph, Mo., and Dodge City, Kan., is now with Alfred G. Clarke, 630 West Lake Street, Chicago.

Alex. Bailey, of Mt. Sterling, has recently finished his new store and is now occupying it. Mr. Bailey was so unfortunate as to be burned out last spring, and now feels thoroughly settled for the first time since that occurrence.

Chas. A. Zemp, of Rockford, has added a jewelry department to his confectionery and fruit store. Mr. Zemp has had experience in repairing watches, and also held a responsible position with the Rockford Watch Company for several years.

G. D. Parsons writes us that the Chicago (now Rockford) Watchmakers' Institute is flourishing grandly in the new location, and adds, "Five young men will leave Bangalore, India, to attend the Rockford Watchmakers' Institute early in 1895."

J. H. Purdy, of Chicago, during a recent visit to Peoria, lectured to the students of Parsons' Horological Institute, on mainsprings and the causes of their breaking. Many pointers on picking good mainsprings were given to the young watchmakers.

Reinhart & Mittendorff, of Lincoln, have recently moved into the room formerly occupied by Danley's Temple of Music, which has been redecorated and much improved in every way. This enterprising young firm have increased their stock, making their store more attractive than ever.

Carroll A. Warner, an optician, of Evanston, dropped dead on the street at St. Louis while on his way to a depot

to take a train, October 11th. He was a clever man in his line, and was favorably known to a number of jewelers throughout the West. One of his last engagements was with Wm. Bard & Co., of Portage, Wis. His friends in the trade will regret to hear of his sudden demise.

The Diamond Cream Silver Polish Co., Polo, is having a voluminous demand for its well-known specialty, the diamond cream silver polish, for cleaning and polishing gold, silver, brass, nickel, mica, tinware, metal signs, rails, marble or glass. The polish is sold by the manufacturers at \$1.50 per dozen, freight paid on all four-dozen orders. In addition are given 1000 dodgers with the jeweler's advertisement neatly printed at the bottom, and also a pretty wire rack for show-case display. The polish is sold to jewelers only.

A Waukegan jeweler makes this observation: "If one man could hear all the clocks in Waukegan strike there would be no silence for him. The difference in time would be so much that before the last clock finished striking four o'clock some other clock would begin striking five. There probably 2,000 clocks in Waukegan, and it would be a hard matter to find two of them with exactly the same time. Two or three clocks in the same house are never alike. Watches are the same way. Even the regulators are sometimes several minutes apart, and a man who is claiming to have the correct time always gives the regulator that he is set by."

Jeweler William H. McCord, of Tangier, one night early in last month shot and killed a burglar who had looted his establishment. Mr. McCord has a burglar alarm in his store which connects with his residence. On the night in question the alarm was sounded, and Mr. McCord and two neighbors went to the store. They met the burglar at the door. Mr. McCord pointed a shotgun at him and told him to hold up his hands. Instead the burglar shot at the jeweler, striking him on the breast. Mr. McCord discharged his gun, and the load entered the thief's head, killing him instantly. He carried in his hands and pockets a large quantity of stolen goods.

Indiana.

Albert Allen is the new jeweler at Elkhart.

Artes & Alt have succeeded C. F. Artes, at Evansville.

Jeweler C. D. Tilson, of Greensburg, has recently completed, and is now occupying, a handsome new storeroom.

W. J. Rowe & Co., of Marion, have just opened one of the most complete retail jewelry and bric-a-brac stores in Indiana.

H. C. Kachlein, of Lafayette, has recently returned from a New York trip. Mr. Kachlein was buying his holiday goods in the metropolises.

A handsomely gotten up little memorandum book, with some pages of very useful and interesting information, was a recent successful advertisement of S. C. Bingaman, Eaton.

At Columbia City an itinerant pearl-hunter had such good fortune in Blue River that some of the citizens went hunting themselves, and had fair success. A stock company may be formed to dredge the creeks and lakes thereabouts.

Jeweler Henry Rossier, of Martinsville, was married in Indianapolis, November 15th. He and his bride spent their honeymoon in Cincinnati, the guests of Mr. Joseph Noterman, of Joseph Noterman & Co., at his home in Covington.

E. R. Biggs, Goshen, has retired from business. His jewelry store has been purchased by J. H. Ralston and G. B. Kessler, who took possession under the firm name of Ralston & Kessler. Mr. Ralston is well known as Mr. Biggs' former assistant, and by his long experience in the business has become proficient. Mr. Kessler has resigned from a lucrative position in Chicago to go into the present business with Mr. Ralston.

Ritter & Ryan are opening a new jewelry establishment at Muncie. They expect to be ready for business by the middle of the month. Mr. Ritter has been connected with the jewelry trade of Muncie for fifteen years; several years of that period he was head of the firm of Ritter & Tenney, who sold out about two years ago. Mr. Ryan, for several years past, has represented the Julius King Optical Company in the middle West, and is a former jeweler. They will have handsome mahogany fixtures, and will be up-to-date in everything. They will have rather a swell shop.

Iowa.

George F. Blakeslee has recently opened a jewelry store at Anamosa.

Fred. Knell, of Perry, has recently moved into a handsome new store, and is in every way well equipped for a fine holiday business.

(Continued on page 960 d.)

"ALWAYS AHEAD." OTHERS FOLLOW.

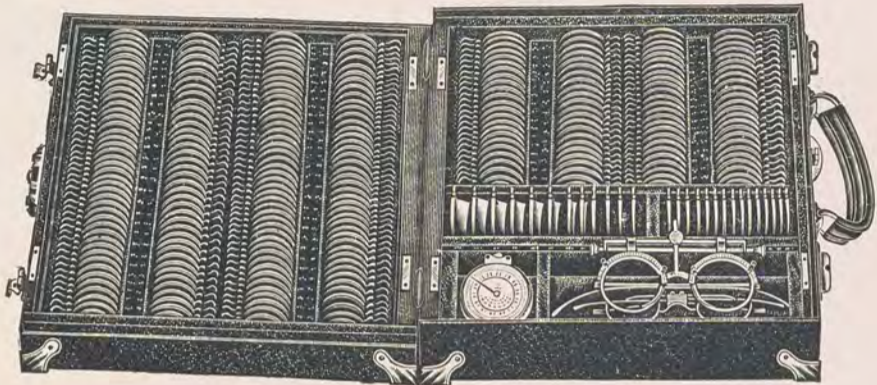
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Geneva Optical Company, 65 Washington Street, CHICAGO.



No. 1004 AND 1008. CLOSED.

NEW STYLE FOLDING TRIAL CASES.



No. 1004 AND 1008. OPEN.

The Geneva Lens-Measure, Improved.

Price, \$10.00, net.

The improved Lens-Measure works upon the same principle as the original instrument, but the movement is different and more exact. The size is reduced so that it can be readily carried in the pocket. The inch numbering is added upon the outer circle, and in addition a Vernier movement is added for the purpose of more readily measuring periscopic lenses.

Full directions with each instrument for measuring every form of spherical, cylindrical or sphero-cylindrical glasses.



Illustration full size.

Agents wanted in every city and village in the United States for the

Improved Bertier Parabola.

Exclusive territory given, and advertising circulars, electrotypes, and test types furnished with the goods. You can sell more spectacles and get better prices by making these goods your specialty. For terms, etc., address,

Geneva Optical Company.

Send for Catalogue and mention THE KEYSTONE.



NEW CATALOGUE NOW READY.

NEW PRICES. NEW INSTRUMENTS. For Oculists and Opticians.

A full line of Photographic Goods of all kinds carried in stock.

SEND FOR SPECIAL PHOTO. CATALOGUE.

PRESCRIPTION WORK TO ORDER, PROMPTLY AND ACCURATELY.

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heretofore almost impossible, is now easy by our process, having been brought to perfection, after many experiments and great expense.

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Jewelry Repairing for the Trade

Forty years' experience in this line insures first-class work and at a reasonable price. If you will send me a trial lot with full directions, you will be satisfied with the result.



Maker of
The Original Gold Crown Filled Ring,
McCall's Electro-Galvanic Ring,
AND
Solid Gold Plain Rings.



W. E. McCALL } 104 & 106 So. Eighth St.,
(Successor to McCall & Newman) } PHILADELPHIA.

Among the Trade.

Iowa.

(Continued from page 960 b.)

E. M. Kennedy, formerly of Cedar Rapids, has opened a store in West Bend.

E. L. Olney, of Sheffield, last month sustained a loss of \$4,800 by fire. The property was insured for \$2,500.

Charles N. Clark, of the firm of Myers & Co., St. Paul, Minn., has assumed the management of the Thompson Jewelry Company, Sioux City.

F. B. Crane, recently of Chicago, has bought an interest in the old-established business of his uncle, H. N. Crane, under the firm name of H. N. Crane & Co.

Hatterback Bros., Sioux City, are among the jewelers who are noticeably proficient in the art of advertising, and are profiting by the practice of it. A recent diamond-shaped "ad." in their local papers with the catch-line "Is your sweetheart worth a diamond?" was specially meritorious.

Kansas.

E. K. Shaw, a well-known Kansas jeweler, for years located at Manhattan, has moved to Florida, and settled at Crescent City.

I. C. Coin has succeeded to the business of J. S. Dunn, at Hutchinson. Mr. and Mrs. Dunn have removed to Nebraska City, Neb., where Mrs. Dunn has opened up an office as an optician.

W. J. Rankin, who formerly carried on a watchmaker's business in Armourdale, has again located there in his old business.

John P. Hale has succeeded C. T. Clingerpiel, of Wamego. The business will be in charge of E. L. Sloan, formerly of Howard.

John P. Kelley, a number of years with C. C. Freeman, Concordia, has opened up a store of his own in that town. Mr. Kelley is a bright young man, reliable and painstaking, and will make a success of his new venture.

C. C. Freeman, of Concordia, who auctioned off the greater part of his stock in October, is figuring on leaving Concordia, and has been seeking a new location the past month. He has several points in view, but at last accounts had not decided upon any single one of them.

E. B. Roser, manager for Mrs. M. Roser, of Wellington, has bought a half interest in the business, and the firm now is Roser & Co. Mr. Roser has had entire charge of the store since the death of his brother, the late Edward Roser. His management has been a success, and we are glad to see that our young friend's good work has been rewarded.

The A. Gluck Jewelry Company has been incorporated in Dodge City, with a capital of \$3,500. The incorporators are A. Gluck, Leo Gluck, Manta Gluck, Louis Loebner and Max Gluck. This is a continuation of Jeweler A. Gluck's business at above point. Mr. Gluck is one of the pioneer men of the trade in western Kansas, and has been well known there in business and political circles for years.

Kentucky.

Jeweler E. E. Edgar, of Cloverport, has recently removed to Owensboro.

W. W. Howe, of Carlisle, and Miss Elizabeth Keller, of Cynthia, were married last month at the Gibson House, Cincinnati.

Geo. Wolf & Co., of Louisville, have made extensive improvements in their store, and have had new paper hung on the walls. Their establishment is now more attractive than ever.

Victor M. Lorch, the Market Street jeweler, of Louisville, has made extensive alterations in the front of his store. One of the entrances has been closed, and the space thus obtained was utilized by the enlargement of the show windows. The front has been painted, and a great improvement is noticeable.

Massachusetts.

F. J. Landry opened an optical store about the first of last month at 201 Main street, Brockton.

A souvenir edition of the *Daily News*, Springfield, contained a biography of D. F. Leary, the well-known jeweler of that city. The notice gave an interesting account of Mr. Leary's travels in Europe.

Michigan.

Henry Tuttle has embarked in business at Otsego.

J. H. Chapman has recently embarked in the jewelry business at Grand Rapids.

E. L. Church, of Union City, has embarked in the jewelry business at that place.

W. D. Le Roy, of Cedar Springs, has removed to Rockford, Ill.

L. Bedell, of Romeo, has recently returned from a visit to Buffalo, N. Y., where his son is cashier in a bank.

A. Preusser, one of Grand Rapids' pioneer jewelers, visited New York last month for the purpose of making a selection of holiday novelties.

A recent slight blaze in the basement of the store of Burt & Moody, Battle Creek, caused some little damage, which was fully covered by insurance.

O. E. Williams, of Pittsfield, is one of the hustling dealers of the State. He has lately sold a large number of railroad watches to the Lake Shore boys.

I. D. Lane, of Sand Beach, has sold his drug and jewelry business to McIntosh & Zeiter, who will continue at the old stand. Mr. Lane is now engaged in farming.

F. G. Smith, Jr., of F. G. Smith & Sons, Detroit, has recently taken the high degrees in Masonry. He is now a full-fledged thirty-second degree Mason, and a Mystic Shriner as well.

M. C. Graves, of Vassar, was confined to his home by illness the early part of November, the first time he has been compelled to be away from business by sickness since he began for himself.

Eugene Deimel, the Detroit wholesaler, is now exhibiting a very complete line of hollow ware, which he has recently put in. A considerable space in the back part of his establishment is devoted to this new line.

Henry M. Avery, a South Haven jeweler, sold "Avery Beach" to George B. Kelley, of Rockford, Ill., the secretary and treasurer of the Rockford Silver Plate Company. The figure named in the purchase was \$12,000.

Jeweler E. J. Brown, of Reading, has a lively young jeweler at his home who arrived only recently, and who will not be able to use the pliers or put in a pin stem for some years to come. His name is also Brown, and he looks like his pa.

"THE KEYSTONE is the best journal I know of, and I read many. It is worth three times its subscription price. It is full of useful hints to the trade. I keep all my copies for reference in the future, and I learn something of value from each number," said J. L. Nowey, optician, with L. Black & Co., Detroit, recently.

F. G. Smith & Sons, of Detroit, will occupy their new enlarged Woodward Avenue store about the first of the new year. The storeroom is the same depth as their present store, but double the frontage. All departments will be on the ground floor. The room will be finished in heliotrope and steel, giving it a breezy, yet artistic, appearance. It will be a pretty store, and, altogether, will be in advance of their present establishment.

D. B. Bancroft, manager of the watch repairing department at Wright, Kay & Co.'s, Detroit, is a busy man. His firm are watch inspectors for the Michigan Central Railway. This brings under his care over 900 watches which have to be given a weekly rating. Mr. Bancroft thinks theirs is about the largest single inspectorship in the country. However this may be, there can be no question but that he has his hands full every day.

Minnesota.

J. J. Estey has recently opened a jewelry store at Little Falls.

Karl Rosell has opened a watch repairing establishment in North Branch.

W. E. Weld, of Weld & Son, Minneapolis, was a trade visitor in the New York market early last month.

C. A. Van Bergan, the West Superior Street jeweler, Duluth, has opened a handsome new store on Central Avenue.

G. T. Wasrud, formerly of Albert Lea and Elmore, early last month opened a new jewelry establishment in Mankato.

S. Anderson and his brother, C. A. H. Anderson, of Willmar, have formed a partnership under the firm name of Anderson Brothers.

The J. M. Donelson Jewelry Company, of Minneapolis has been incorporated with a capital of \$25,000. The incorporators are J. M. Donelson, E. M. Aldrich and John M. Flannigan.

A. H. Simon, the widely-known St. Paul jeweler, has been carrying on a most successful auction sale the past month. P. J. Burroughs, of Chicago, conducted the sale, assisted by Lew Dodd.

Jeweler George F. Cutting, of Winona, has remodeled his store, making extensive improvements throughout the establishment. He now has one of the pretty stores of the State, and though a young man, established but a few years, is enjoying a thriving trade.

Missouri.

Goods worth \$100 were stolen recently from the store of Jacob Gartner, of Linneus.

O. P. Ragan has opened a new jewelry store at Grant City. He is formerly of Ridgeway.

Jeweler John Gilleland, of New Cambria, has lately moved into a handsome new residence.

Joseph B. Payne has bought Neil Kunkle's business at Oregon, and will continue at the old stand.

J. N. Kring, of Moberly, was visiting relatives at Kansas City, Kan., for a week last month.

T. A. Haney, recently of Lyons, Kan., has located in Springfield, and has engaged in the jewelry business.

J. B. Keith, of Spickards, has disposed of his business to B. Lockheart, of Trenton, who will continue at the old stand.

C. I. Lee, of Kansas City, Kan., who recently started a branch store at West Plains, Mo., is doing a fine business at his new store, which he visited last month.

J. E. Waltz, for ten years in the employ of Gimelich & Huber, Booneville, opens an entire new establishment in that city, December 1st. It will be quite a swell store.

Jeweler Clark, of Clark & Warner, Carrollton, was off on a hunting expedition down in the Indian Territory, last month. He had fine sport and bagged considerable game.

S. P. Noel, a former well-known Springfield jeweler, has recently opened a new store at Paris, Texas. Mr. Noel moved away from Springfield for the benefit of his wife's health.

Jeweler J. T. Nichols, of Trenton, was appointed by the mayor of that city as delegate to the Trans-Mississippi Commercial Congress, which met at St. Louis, November 26th.

The business of the late J. G. Willeke, Springfield, has been purchased by Paul Ellenberg, his former partner. Mr. Ellenberg will continue the business under the name of the J. G. Willeke Jewelry Company.

The Retail Jewelers' Association of Missouri have drafted resolutions asking the legislature to more practically define the duties of jewelry auctioneers, and to prohibit auctions at night in St. Louis stores. Legal talent has been engaged to push the cause.

Jeweler W. E. Crellin, of W. E. Crellin & Bro., Chillicothe, was elected treasurer of Livingston County, on the Republican ticket, at the late election. "Billy," as he is best known, along with many of his friends, is much elated over the result of his campaign, and they haven't gotten through with their shouting yet.

A. F. Zimmerman, of Warrensburg, well known among the trade as "Pap," is a very enthusiastic optician. He is a graduate of the Chicago Ophthalmic College, and is giving most of his time to this department of his business. He is attending to the near-by towns, while his son Bert is in charge of the store, with fine success.

Nebraska.

R. S. Thornton has recently embarked in the jewelry business at Cozad.

Harry Krotzer and George White have recently opened a store in Fairbury. Mr. Krotzer was formerly with A. D. Ackerman.

C. S. Raymond, of Omaha, has recently returned from a trip to New York and Chicago, where he was seeking holiday novelties.

John Baumer, Omaha's genial pioneer jeweler, has been making extensive improvements in his store preparatory to the holiday season.

H. C. William, Doniphan, desires to inform those mailing catalogues or price-lists, that he is the only legitimate jeweler in his town.

J. F. E. Weiland has purchased the interest of his father in the jewelry store of Weiland & Son, Fremont. Mr. Weiland, Sr., expects to soon leave for his old home at Vienna, Austria.

W. I. Seymour, graduate optician, with the Aloe-Penfield Company, Omaha, reports trade greatly improved of late. He is a pupil of Dr. H. M. Martin, of the Chicago Ophthalmic College.

J. S. Hursh, a former well-known jeweler of Hastings, has moved to Riverside, Cal., where he has opened up a jewelry establishment. His old friends in Nebraska will wish him success in his new home.

Robert Herre, of Fremont, has purchased the jewelry store of Dr. Atkinson, at Dodge, and engaged in business there early in November. "Rob" has a circle of friends in Fremont co-extensive with the census returns, and everybody will wish him abundant success in his venture, says the Fremont Herald.

Continued on page 960 f.



It makes no difference what you may want in the rush of the **Holiday Season**, from the smallest piece of Watch Material to the finest piece of Diamond Jewelry, you can send to us and have your orders filled promptly and satisfactorily, and save time and money.



- 1st.—Our stock is complete,
- 2^d.—Our prices are the lowest,
- 3^d.—No goods sold at retail,

which enables us to put our entire force on filling **our** customers' orders instead of catering to **your** customers.

M. SICKLES & SONS,

618 Chestnut Street,

Philadelphia, Pa.



ESTABLISHED 1880.

ESTABLISHED JEWELERS ONLY.



P. J. Burroughs

THE JEWELERS'
AUCTIONEER

103 STATE STREET
CHICAGO, ILL.

Reference of a few sales I have conducted in different parts of the country. I can also refer you to almost any manufacturer or jobber of jewelry or silverware in America. Any of the undersigned would be pleased to inform you as to my ability:

Joseph & Fish, Chicago, Ill.
E. Hallett, Lincoln, Neb., 3 sales.
I. G. Willeke, Springfield, Mo., 2 sales.
Baldwin & Co., St. Joseph, Mo.
A. Pinover, New York.
A. T. Threadgale, Taylor, Texas.
H. Hahn, Lansing, Mich.
Worden & Morris, Fort Wayne, Ind.

C. S. Durfee, Davenport, Iowa, 2 sales.
A. Steinau, Cincinnati, Ohio.
C. B. Scott's Sons, Mayfield, Ky.
D. Domnau & Bro., Waco, Texas.
McKee & Schunck, Celina, Ohio, 2 sales.
M. B. Wright & Co., Kansas City, Mo.
M. J. Benjamin, Denver, Colo., 2 sales.
J. H. Bihl, Fremont, Ohio, 4 sales.

John Leith, Bay City, Mich.
Austin & Hunter, Belton, Texas.
Roth Importing Co., Denver, Colo., 2 sales.
The Jaccard Watch and Jewelry Co.,
Kansas City, Mo.
W. A. Pfister, Sheboygan, Wis.
Geo. Beemer, Lead, South Dakota.
O. F. Zimmerman, Jeffersonville, Ind.

W. B. Taliaferro, Jackson, Tenn.
G. W. Brown, Cheyenne, Wyo.
M. German, San Diego, Cal., 2 sales.
J. H. Alden, Beatrice, Neb.
H. H. Bisbee, Ludington, Mich.
C. W. Miller, Bloomington, Ill.
Hight & Fairfield, Butte, Montana.

Among the Trade.

Nebraska.

(Continued from page 929.)

Captain S. H. Morrison, Nebraska City, is superintending the construction of the G. A. R. hall at that place.

Jeweler A. Mandelberg, of Omaha, has taken hold of the much-mooted question of the department store handling jewelry in a practical manner. He has opened a jewelry department in the "Boston Store," one of Omaha's dry goods department stores.

New Mexico.

J. W. Bartlett, Las Vegas, who last spring, as is usual with him, closed his store and sojourned in Michigan for the summer, has returned to Las Vegas and re-opened for the fall and winter tourist business.

New York.

C. E. Lewis has a jewelry store at Niagara Falls.

John S. Baird, jeweler, Watertown, and Miss Milly B. Stiles, of Middletown, Conn., were married on November 1st.

Edward E. Baker, the Warsaw jeweler, has been appointed watch inspector on the Buffalo, Rochester and Pittsburg Railroad.

We return thanks to P. F. Valentine, Dunkirk, for the copy sent us of the handsome illustrated history of that prosperous city, published under the auspices of the local Young Men's Christian Association.

The Rhinebeck jewelry store of Edwin Styles recently celebrated its centennial. It was established in 1794 by James Styles, Jr. An "At Home," given by Mr. and Mrs. Styles, was an enjoyable part of the celebration.

Charles F. Osgood, son of William B. Osgood, manager of the Keating Wheel Company, of Holyoke, and formerly traveler for Hayden W. Wheeler & Co., New York City, on October 14th saved the lives of four persons, who were capsized in a small sail boat on the Connecticut river at Smith's Ferry, Mass. The rescue was as daring as it was successful, and the rescuer well deserves the medal to be awarded by the Humane Society of this State.

North Carolina.

C. D. Tilson, of Greensburg, is now comfortably situated in his handsome new store, which he has completed this season.

Bill Nye, the humorist, whose famous "upright farm" is located near Asheville, has lately authorized Miss A. M. Cole, engraver, of that city, to place on the market "Bill Nye" souvenirs. These will be engraved on various silver novelties, spoons, etc., the subjects being taken from his published sketches.

Ohio.

Aman & Crane, of Dayton, have enlarged their store to twice its former size.

F. M. Powers, of Youngstown, visited New York early last month, seeking holiday novelties.

Jeweler William Walcott, of Toledo, was in New York the early part of last month on the lookout for late holiday novelties.

Brunner Brothers, of Cleveland, formally opened their pretty and attractive new store at 57 Euclid Avenue, November 19th and 20th.

George Deuble, the well-known Canton jeweler, was a trade visitor in New York last month, in search of the new things in holiday goods.

Walter King, of the Julius King Optical Company, of Cleveland, is in New York this month. He returns the first of the year, when his brother Clifford goes to the New York office for a month or two.

M. Henry has purchased the interest of H. T. Earles in the business of Earles & Henry, of Ironton, and will continue the establishment under the name of the Ironton Jewelry Company. The business will be conducted by W. J. Henry.

G. E. Medsger, Leetonia, has placed in his window a motor which revolves circular shelves and pyramids on which he very artistically displays a quantity of jewelry. The ingenious contrivance reveals Mr. Medsger's rare mechanical skill.

The Webb C. Ball Company, of Cleveland, have recently put in a new front, Grecian style, a new ceiling with electric lights, new mahogany tables and show-cases, of Grecian and Ionic design, and otherwise added to the attractiveness of their store preparatory to the holiday season. The Ball Company are among the progressive dealers of the State, who are making business by pushing business. Mr. Ball informed THE KEYSTONE representative that his Com-

pany now had thirty-four people on their pay-roll, and that they had done a steadily increasing business right along through the trying times of the past eighteen months.

Jeweler George Deuble's quaint and handsome new store at Canton is one of the striking establishments of the West. It is built of Ohio yellow sandstone, and only recently finished. In design it is rather out of the usual, but certainly attractive and pleasing. The inside decorations are fine, fixtures modern and beautiful, and, altogether, Mr. Deuble has a store he can well be proud of.

J. J. Vernier, for several years connected with J. J. Freeman, Toledo, has embarked in business for himself at 214 Main Street, East Toledo. Mr. Vernier has invented and recently patented a graver sharpener, which he claims is the most practical, accurate and popular-priced tool of the kind that has ever been offered to the trade. It will be on the market soon after the first of the year.

Adam J. Loos, assayer, sweep-smelter and gold and silver refiner, Toledo, is a bright young man in his line—full of enthusiasm and energy for the work. Though still a young man, he has had abundant experience with one of the largest refining and smelting firms of Chicago. He bears a thoroughly reliable reputation as a business man, his father being a well-known iron manufacturer of Toledo. Readers of THE KEYSTONE should send their old gold and silver to Mr. Loos, for he will give them good value and quick returns.

A mistake for which THE KEYSTONE thinks an explanation is due, crept into an item in our November issue in this column in regard to the change of location of the Cowell & Hubbard Company, Cleveland, and the attendance at the opening of their new store, October 22d. The item stated that the attendance was 1500—it should have been 15,000. This latter figure may startle many of our readers, but to those who are acquainted with the "greater Cleveland," which now claims a population of near 350,000, making it the largest city in Ohio, and the fine population that is tributary to her as well, will not be astonished at this estimate of the attendance at the opening of this grand store of their favorite jewelry firm. Rather they will consider it a conservative estimate. In this connection it may not be out of place to give a short sketch of this representative Ohio jewelry firm and their splendid establishment. The firm left the old quarters on Superior Street, which they had occupied since 1879, and where their business had grown to large proportions, and took up their position in the new ten-story Garfield Building, on Euclid Avenue, at the corner of Bond. The entire first floor of the new block is occupied by the Cowell & Hubbard Co., and nearly all the space is devoted to salesrooms. The main salesroom, at the entrance on Euclid Avenue, is 53 x 100 feet, and well lighted by large plate-glass windows all along the Bond Street side. Mr. Hubbard's private office is immediately to the right of the entrance. The show cases, center cases, counters and wall cases are of walnut and rosewood set with plate glass. All the cases are lighted from the interior by small electric lights, adding materially to the brilliancy and attractiveness of the display. In the corner of Euclid and Bond, between windows on both sides, is the display of diamonds. At the rear of the main room is the optical department, which is under the supervision of the specialists, Drs. Clark and Jordan. A slight elevation leads through a thirty-foot entrance to the china, glass and art department (a new departure for the firm, by the way), which is filled with exquisite china, cut glass, lamps and bric-a-brac. Frank Martin, for years with I. T. Bowman & Sons, will have charge of this department. In the rear and extending through to Vincent Street, are the engraving and work rooms, which are equipped with every appliance known to the trade to facilitate and execute fine work. Mr. Hubbard has some very able gentlemen as his lieutenants: J. H. Danforth, secretary and treasurer; J. T. Vansant, retail manager; F. L. Haldy, Frank Paton, Fred. Van Buskirk and Frank Moore have been with the Cowell & Hubbard Co. for years; while W. D. McVitty, formerly with the Webb C. Ball Co., and J. H. McMillen, long with P. L. Miles, have recently been engaged by Mr. Hubbard to complete his complement of salesmen.

Oregon.

Will & Stark, of Albany, have lately moved into new quarters.

Theo. W. Hansen, Portland, formally opened his new jewelry store at 271 Morrison Street, November 1st. His establishment is said to be one of the most attractive in the Northwest. It is furnished with all modern conveniences, and is stocked with an extensive and pretty line of goods of all kinds.

Tennessee.

The jewelers of Memphis have prepared for a large holiday trade. Cotton has been coming in right along, but the continued low price has prevented any big increase of business so far.

Texas.

The marriage of Frank Thompson, son of Jeweler J. E. Thompson, Galveston, to a belle of that city, took place last month. Young Thompson is a practical optician, and has entire charge of the optical department in his father's establishment.

S. W. Risien, Mexia, recently brought his large stock under the notice of the local public by means of a very prettily compiled pamphlet, which showed his business capacity, good taste and advertising talent.

Virginia.

C. S. Sherwood, of Portsmouth, was seeking holiday novelties in New York the early part of last month.

T. T. Biller has removed from Orkney Springs to Broadway.

Washington.

Louis Luchardt, a jeweler of Spokane, has opened a store in North Yakima.

T. G. Farrer is in charge of the optical department at Bangle & Hansen's, Tacoma.

Wisconsin.

Frank Braun, of Antigo, has disposed of his entire stock of jewelry to John Braun, of Two Rivers. Mr. Braun will increase his line of goods, keeping nothing but a first-class stock. Anton Molle will remain with Mr. Braun.

Fred. H. Coburn has recently embarked in the jewelry business at Palmyra.

Thomas Phillips has recently embarked in the jewelry business at Chippewa Falls.

Jeweler J. W. Spence, of Racine, was a trade visitor in New York the early part of last month. Mr. Spence was making his selection of Christmas novelties.

A. H. Stecher, Milwaukee's pioneer jeweler, has lately moved into a new store.

D. L. Jenkinson has opened a store at Minocqua.

Miscellaneous.

George Cook, Prescott, Arizona, has removed his store to Phoenix.

The marriage of Tony S. Euper and Miss Zula M. Ribling was celebrated in Van Buren, Ark., on November 27th.

The business of Charles K. Morgan, of Savannah, Ga., has been purchased, and will be continued by Anthony Brothers.

A. M. Hill, the well-known New Orleans jeweler, recently returned from a purchasing trip to the New York market.

Frank Van Marker, jeweler, Ludlow, Pa., and Miss Anna Lindgren, of the same place, were married recently.

R. P. Starbuck has embarked in the jewelry business in Grant City, Wyoming.

H. T. Bramer, Attica, N. Y., writes to the Jewelers' Security Alliance: "On the night of November 23d, burglars broke open three safes in this small village, and I have every reason to think they passed me because of my membership card, which I hang on the knob of my safe."

"Enclosed please find amount of one dollar for subscription to The Keystone. Small amount of pay for a big amount of information."—C. Sieghold, jeweler, Salinas City, California.

How to Write a Circular.

The construction of a paying circular requires care. For those who are interested in the problem we make the following suggestions:

Don't try to be funny; a pun or racy head-line is apt to be resented as facetious, or at best flippantly regarded.

Never offer things free; every sensible housewife knows that no one can give something for nothing.

Never quote goods below cost. Every one regards with suspicion an article advertised below cost.

Let your circulars be dignified and attractive. Remember that a circular is rarely kept for reference, and unless you present an idea worthy of repetition or comment in the head-line the fine print is apt to be overlooked.

Never send out a trashy-looking circular, better send half as many well-printed ones. Convey the impression that you are well-stocked and that your goods are the best and your prices moderate.

—Grocery World.

The Jeweler's School of LETTER AND MONOGRAM Engraving.

ESTABLISHED 1889

6th Successful Year

over 300 GRADUATES

"FIRST ENG. SCHOOL In This Country," "ONLY SCHOOL recognized and patronized by our leading Jewelers and BUSINESSMEN"

"BEST SYSTEM Practical, Individual INSTRUCTIONS: in artistic Lettering and Monograms, Designing, Etching, CHASING, ENAMEL-CUTTING, etc."

Summer class 1893

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1312 COLUMBUS MEML. BLDG. CHICAGO, COR. STATE and WASHINGTON-STs.

RICHARD O. KANDLER, PROP'R. and CHIEF INSTRUCTOR.



Special Offer Still Remains Good.

See November Keystone, page 846.

Special Notice.
If goods are not thoroughly satisfactory, your money refunded.

STAR American Main-springs, for Waltham, Elgin, Hampden, Rockford, Illinois, etc. The best quality and finest finished spring on the market. The tips are fitted perfectly. Should any break, send us the ends of springs marked "H. B. Peters" and they will be replaced by new springs. None better in the market at any price. Our price, **\$1.00 per dozen; \$10.50 per gross, fancy cabinet included.**

Cock and Foot Jewels. American Balance-Jewels in settings for Waltham, Elgin, etc. **75 cts. per dozen; \$8.00 per gross, cabinet included.**

Balance-Staffs. American finished Balance-Staffs, for

Waltham, Elgin, etc. **75 cts. per dozen; \$9.00 per gross, cabinet included.**

Swiss Hole-Jewels. Balance and Wheel, assorted, in vial. Prices, **\$1.00, \$1.50, \$2.50, \$3.50 and \$4.50 per gross.**

Swiss Cap Jewels. Nicely assorted, in vial. Prices, **20 cts., 45 cts., 67 cts. and 87 cts. per gross.**

Pendant-Screws, for holding lever-set crown in case (a long-felt want supplied). Price, **50 cts. per gross, vial included.**

Spectacle and Eye-Glass Screws. Complete assortment—bronze, blue and nickel. **75 cts. per gross. In vial.**

American Roller-Jewels. Splendid assortment of one gross, in neat cherry cabinet. Price, complete, **\$3.00.**

Scarf-Pin Backs. Gilt, **12 cts. per dozen; fire-gilt, best, 25 cts. a doz.;** rolled-plate, **65 cts. a doz.**

Cuff-Button Backs. Patent lever. Howard & Son's make. **65 cts. per dozen; \$7.50 per gross. Assorted.**

Ear-Wires. Rolled-plate, good quality. **25 cts. per dozen; \$2.50 per gross. Any style.**

Rolled-Plate Swivels, gents' size, **\$1.65 per dozen.**
" " ladies' " **\$1.35 " "**

14 K. Seamless Filled Swivels, gents', **\$2.75 per doz.**
" " ladies', **\$2.00 " "**

Plated Hand-Burnished Swivels, large, **\$1.00 a doz.**

Fire-Gilt Swivels, large, **65 cts. per dozen.**

Gilt Swivels, large, **35 cts. per dozen.**

Rolled-Plate Bars, gents', **\$1.50 per dozen.**

Rolled-Plate Bars, ladies', **\$1.25 per dozen.**

Fire-Gilt Bars, **65 cts. per dozen.**

"Star" Brand Pin-Tongs, assorted, separated, in neat case, **75 cts. per gross.**

SEND IN A TRIAL ORDER.
SPECIAL.—All the above items subject to 6 per cent. cash discount. To receive prompt attention, orders should be accompanied by cash.

H. B. PETERS & CO., 177-179 Broadway, New York

When in New York, make our office your headquarters.

War News from New York!

PRICES SLASHED!

Big Profits Bombarded!

General Cash Carries The Day!

No Cheap, Trashy Goods.

Great Novelty!

Big Seller!

Good Goods at the Price of Rubbish.



No. 1.—Coin silver, silver cap, full top jeweled movement, full fancy engraved cases, **\$2.45**
No. 2.—Same with second hand, **2.75**
No. 3.—Same in 10 karat gold, **7.15**



Perpetual Calendar, Day of Week, Day of Month, Phases of Moon, Oxydized Steel Case, Good Anchor Movement.
\$7.25 NET.



No. 4.—Coin silver, silver cap, full top jeweled movement, full fancy engraved cases, **\$3.45**
No. 5.—Same with second hand, **3.85**
No. 6.—Same in 10 karat gold, **9.10**

Always Look to Us for
Snaps!

H. B. Peters & Co.
8 Maiden Lane, New York.



WESTERN BUREAU OF THE KEYSTONE,
ROOM 817,
COLUMBUS MEMORIAL BUILDING,
CHICAGO, November 28, 1894.

There is a very fair trade in progress among our jobbers. Country buyers are more numerous than in the early part of the month. Better reports are being received from travelers as well, and the mail order business is good. Holiday goods are having considerable attention. Representative jobbers and manufacturers report affairs as being in a satisfactory condition. Grumblers are extremely few. There are a few that complain of dull trade. One says he notes a considerable fluctuation. The remainder seem to be pleased with the present situation, and are cheerfully looking forward to a good December business.

Personal Mention.

M. Wendell, of Wendell & Co., is in the East, on a visit to their New York branch.

C. H. Carsten, formerly with Zierleyn & Carsten, Grand Rapids, Mich., has just opened a jewelry store at Roseland, one of Chicago's southern suburbs.

Carlos H. Smith, treasurer of the Elgin Watch Company, has been called upon to mourn the loss of his mother, who died at his home in Elgin, November 13th, at the age of eighty years.

Miss Eugenia Griffin, the faithful accountant at L. Manasse's, fell, in attempting to mount her bicycle, the early part of the month, seriously bruising her arm.

F. R. Grimmes, well known in the trade, has recently taken charge of the jewelry department at C. M. Linnington's.

G. W. Marquardt, Jr., has been receiving the congratulations of his friends the past month, upon the arrival of an important invoice at his home that will not be expected to build catalogues or fill orders for some years to come. The little jeweler is Mr. and Mrs. Marquardt's first born and is already the king of their home.

A. L. Sercomb, of the Meriden Britannia Company, is back from a visit to the factory.

Beiman Brothers, diamond setters and jewelry repairers, have begun business in room 817, Champlain Building.

Shourds & Kasper, the well-known firm of retail jewelers, at State and Randolph Streets, will dissolve partnership January 1st. Mr. Kasper is confined to his house by illness.

Tatsch & Wild, dealers in diamonds, in the Columbus Building, Chicago, have dissolved partnership. Max Wild will continue the business under the firm name of Wild & Co. Mr. Tatsch will begin business for himself.

H. F. Hahn returned early in the month from a few weeks' visit to Gotham.

George B. Adams, well known in the trade here and at Kansas City, where he was connected with M. B. Wright & Co. for several years, left for Memphis, Tenn., the middle of the month, to take a position with C. L. Byrd & Co.

V. E. Rukgaber succeeds Rukgaber & Crane, at Fifty-fifth Street and Madison Avenue. F. B. Crane has gone to Mt. Pleasant, Iowa, where he has bought an interest in the business of his uncle, H. N. Crane. The firm now reads H. N. Crane & Co.

E. F. Stueckland, manager of the Waterbury Watch Company's Western office, was called to Benton Harbor, Mich., two weeks ago by the serious illness of his sister.

S. K. Houston has returned again to his old love and is again in charge of the Chicago office of the Columbus Watch Company, now known as the New Columbus Watch Company. His office is on the sixth floor of the Columbus Memorial Building.

Kitt Gould, a former well-known Kensington jeweler, has abandoned his old love, the jewelry business, and has entered the field of politics. He is at present connected with the county clerk's office in a clerical position. Mr. Gould has for some time been chairman of the Republican County Committee from the Thirty-fourth Ward (Hyde Park), Chicago. He is now putting in his spare time reading law with a view of making that his profession.

William C. Sommer, in charge of the optical department at Hyman, Berg & Co.'s, and well known throughout Illinois, from his long connection with the trade at Springfield, has been confined to his Hyde Park home for a month past, from injuries received while trying to board an Illinois Central suburban train. Though no bones were broken,

and there will be no serious results from the mishap, Mr. Sommer had a narrow escape, and has had a painful time of it nursing his bruised limbs.

G. Goldsmith, of Goldsmith Bros., the assayers and refiners, has recently returned from a month's trip to the Pacific coast. He reports trade picking up in that country.

Jeweler C. M. Welch, of C. M. Welch & Co., Plymouth, Ind., well known in Chicago from his former connection with Benj. Allen & Co., buried his wife in this city, November 15th. Mrs. Welch died at the home of her parents in Ellis Park, one of our suburbs. She formerly resided here, where she has many friends who will be saddened by the news of her early death.

The funeral of John Davoran, whose serious illness was mentioned in the last number of THE KEYSTONE, took place last week. His death was from that dreaded malady—consumption. Mr. Davoran was known to the trade from his several years' connection with the Chicago office of the Waltham Watch Company as accountant. Manager Kettle bears testimony as to his character and worth, and regrets his untimely taking off. Young Davoran was a man of a promising future, and was respected and well thought of by all who enjoyed his acquaintance.

The Englewood *Saturday Star* of recent date gives F. G. Thearle, Jr., manager at C. H. Knights & Co., a complimentary sketch and portrait. From it we learn that Mr. Thearle was born in Bloomington, Wis., in 1860, moved with his parents to Englewood in 1872, where he graduated from the Englewood High School and later from the Chicago University. Eighteen years ago, when but sixteen years of age, he entered the employ of the above firm, and there can be no higher compliment paid Mr. Thearle than to say that he has risen from an errand boy to his present responsible position with C. H. Knights & Co. in the years that have intervened. In 1886, in connection with his responsible business associates, he established the jewelry and musical warerooms of F. G. Thearle & Co. at Wentworth Avenue and Sixty-third Street. Early in '93 the firm moved to an elegant new store in the Abel Building, corner of Sixty-third Street and Stewart Avenue. They have established a fine trade, and are among the standard institutions of Englewood.

H. C. O'Neil, Chicago's clever and fine-looking jewelry auctioneer, whose half-page announcement will be found elsewhere in this issue, has recently closed a phenomenal sale for C. O. Howe, Nickerson, Kan. Mr. O'Neil did for his client what he had promised. He cleaned up for Mr. Howe his goods, "lock, stock and barrel," and left him the cold, hard cash instead. Mr. O'Neil is now conducting a sale for Harry P. Holmes, Des Moines, Iowa, which promises to be another of the "phenomenal" kind. He says his appearance in the holiday KEYSTONE renewed old acquaintances, and has been the means of stimulating a demand for his services among former customers that is most flattering.

Noah Clark, of Brooklyn, N. Y. brother of Joseph W. Clark, of the F. E. Morse Company, of the Champlain Building, has recently arrived in Chicago, and hereafter will be connected with the above Company in conjunction with his brother. Mr. Clark formerly resided here and was in the employ of F. E. Morse & Son for several years. We are glad to see him back in Chicago again, for Mr. Clark belongs to the type of young men who have made the Western metropolis what she is to-day.

Out-of-Town Visitors.

James E. Fairchild, of E. E. Fairchild & Son, Kasson, Minn., was a pleasant caller at KEYSTONE headquarters early last month.

Charles A. Klie, president and treasurer, and William Reel, secretary and general manager of the New Columbus Watch Company, of Columbus, Ohio, were in Chicago the early part of the month.

W. J. Keating, of Watertown, S. D., was in the city last week, making a selection of holiday novelties.

Mr. Everson, of Everson & Todd, Madison, Ind., was buying holiday goods in this market last week.

O. F. Sheldon, who does business in both Bessemer and Ewing, Mich., was in town last week, purchasing holiday novelties.

J. W. Bartlett, of Las Vegas, N. M., was buying goods in this market the early part of the month.

Jeweler A. Gluck, mayor of Dodge City, Kan., was in town last week visiting his son, Max Gluck, with Otto Young & Co.

Benedict & Wardell, of Maxwell, Iowa, were represented in this market early in the month.

H. Hartman, of Wapakoneta, Ohio, was in town last week, making a selection of holiday novelties.

C. H. Haney, of Haney & Pierce, Belleville, Kan., was in town last week, buying stock for a new store this firm will open at Moberly, Mo., the first week in December.

G. F. Schmermund, of Greenville, Ohio, was buying holiday goods in town last week.

John Baumer, of Omaha, Neb., was in town the early part of the month on a purchasing tour.

J. E. Walz, of Booneville, Mo., was in town the early part of the month purchasing a stock for the new store he is opening at Booneville.

E. W. Bassett, of Bassett & Fairbanks, Jacksonville, Ill., was a trade visitor in town the early part of the month.

Joseph H. Shaefer, of Milwaukee, was buying holiday novelties in this market this week.

Miss Garwood, buyer for L. C. Garwood, of Champaign, Ill., was in town last week in search of holiday novelties.

W. A. Kirkham, of Leavenworth, Kan., was a buyer in this market last week.

M. J. Hoppock, of Frankfort, Mich., was a trade caller in town last week.

D. C. Nelson, of M. Nelson & Son, Marion, Ohio, was in this city last week, making holiday purchases.

A. F. Hall, of A. F. Hall & Co., Janesville, Wis., was making selections of holiday novelties in this market last week.

Miss Spencer, of the firm of John Spencer & Daughter, Edgerton, Wis., was a trade caller in town early in the month.

Murray & Williams, of Guthrie, Okla., were represented in this market early in the month.

J. W. Nesham, of Ottumwa, Ia. was buying goods in town last week.

R. W. Chamberlain, of Marshalltown, Ia., was making selections of holiday novelties in this market last week.

Fred. Eynatten, of Peoria, Ill., was a trade caller here this week.

W. E. Kennedy, of Benton Harbor, Mich., was a buyer in town this week.

John K. Ritter and John P. Ryan, of Muncie, Ind., have been in town the early part of this week, buying an opening stock for their new store, which they will open in that city, December 1st.

Mr. Lyon, of Lyon & Scott, Ottumwa, Ia., was in town early in the month, buying holiday novelties.

Gossip Among the Trade.

THE KEYSTONE's holiday edition found many kind critics and appreciative friends. Its strikingly handsome title page was generally praised.

All branches of the trade in Chicago catering to the demand of the holiday season are doing a fairly good business.

Mr. Sproehnle, of F. M. Sproehnle & Co., informs us that their business is rounding out splendidly. Orders have been coming in freely all fall, and they are well pleased with the outlook for Christmas business.

Otto Young & Co. are busy. The energetic way in which their whole establishment is working shows this. They are reaping the reward of having prepared and sent out one of the most magnificent trade catalogues in the history of jewelry price-currents.

M. S. Fleishman & Co., wholesale jewelers, for several years located at the corner of Market and Adams Streets, have moved into the Masonic Temple, where they have secured large and handsome quarters on the second floor, over the main entrance on State Street.

Returning travelers report that trade is looking up decidedly in Oregon and the Pacific Northwest.

On December 1st, the November session of evening lectures at the Chicago Ophthalmic College closed. The following students were in attendance:

E. R. Smith, M.D., Toledo, Iowa; H. Burke, 235 Park Avenue, Chicago; J. Hopp, 1314 Wolfram Street, Chicago; Fred. Purdy, 27 Aldine Square, Chicago; G. M. Stannard, 417 Center Street, Chicago; Mary Van Patten, Chicago; John Kurts, 69 Washington Street, Chicago; C. J. Wietz, Chicago; E. R. Neeper, M.D., Kahoka, Mo.; Harmon L. Smith, Watkins, N. Y.; Harry Martin, Kahoka, Mo.; Geo. J. Lewis, 533 Warren Avenue, Chicago; Frank Johnston, 56 Evergreen Avenue, Chicago; Abraham H. Summerfield, 3019 Vernon Avenue, Chicago; Walter M. Gates, 3943 Langley Avenue, Chicago; Thos. J. Lambert, 251 Ohio Street, Chicago; Charles Snell, 69 Washington Street, Chicago; Geo. F. Batchelder, Milton, Fla.; J. E. Carlson, Arthur, Ill.; Ed. W. Kelly, Sullivan, Ind.; O. L. Ellis, Wausau, Wis.; C. W. Tousley, Fort Atkinson, Wis.

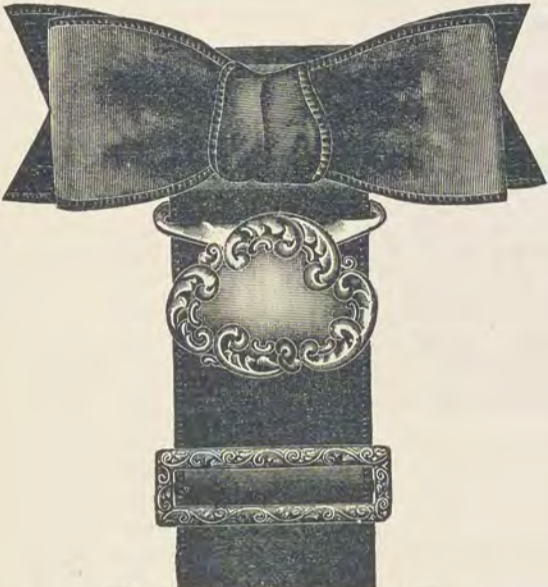
Next session, which will be a day session, begins January 8, 1895, and the outlook indicates a much larger class than ever before. A significant commentary on the efficiency of this school, is the fact that many of the pupils go elsewhere but invariably return.

We have the Stock, We have the Room, We have the Force

and complete facilities for filling promptly and correctly all orders sent us.

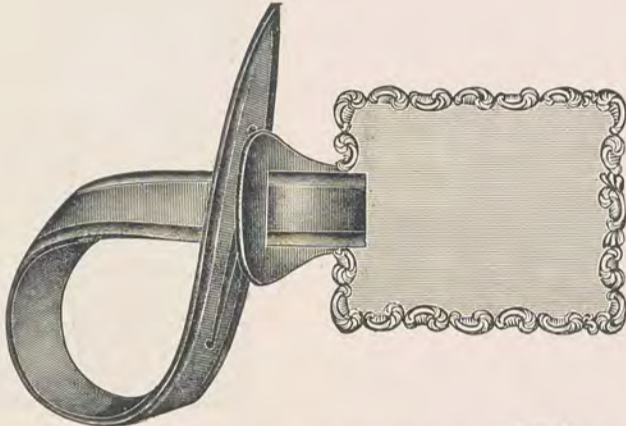
There will be as many Holiday presents given this year as any other. We have goods at prices to suit all purses. A few samples below at List Prices:

USEFUL, ORNAMENTAL MUFF HOLDERS.



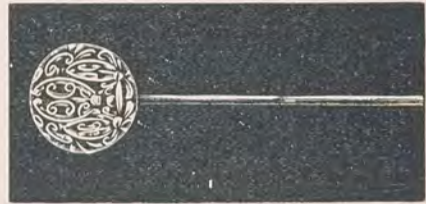
STERLING SILVER MOUNTINGS.
 No. 515. One Clasp and Slide, each, **\$2.70.**
 No. 2515. Two Clasps and Slides, **4.00.**
 Those below have $\frac{5}{8}$ -inch Ribbons, and Clasps and Slides to correspond.
 No. 541. One Clasp and Slide, each, **\$2.00.**
 No. 2541. Two Clasps and Slides, **2.70.**
 Larger and more elaborate Clasps at **\$4.00, \$3.50, \$3.00.**

STERLING SILVER BAG TAG, WITH LOOP STRAP.



No. 67 $\frac{1}{2}$. Per dozen, **\$9.00.**
 No. 74 $\frac{1}{2}$. Oval shape, per dozen, **9.00.**
 Handsome patterns, with buckles, at **\$11.00, \$12.00 and \$13.50** per dozen.

STERLING SILVER HAT PINS.



Assorted Balls, Swords, etc.
 No. 2601. Per dozen, **\$9.00.**

STERLING SILVER HAT MARKS.



No. 7160. With prongs, per dozen, **\$5.00.**

STERLING SILVER PENCIL TOP.



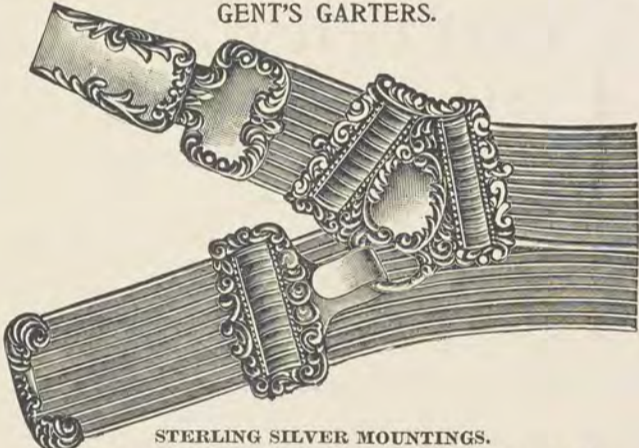
No. 7094. With Rubber Eraser, each, **\$1.20.**

STERLING SILVER TOOTHPICK CASES.



No. 7176. Chased, as per cut, each, **\$3.50.**
 No. 7177. Plain Satin, as per cut, **2.75.**
 No. 7178. Smaller size, plain, per dozen, **8.00.**

GENT'S GARTERS.



STERLING SILVER MOUNTINGS.
 No. 69. Gent's Garters, Blue Elastic, per pair, **\$4.00.**

Illustration of BLOTTER, half-size.



No. 7106. Desk Blotter, **\$7.00.**
 Polished Walnut, Ash or Enameled White Wood, Silver Ornamentation.

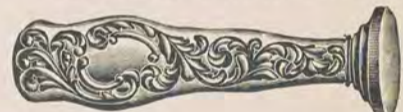
MUSTACHE OR BANG COMBS.

Sterling Silver Trimmed.



No. 84. 2 $\frac{1}{4}$ inches long, each, **\$1.42.**
 No. 82. 3 $\frac{1}{4}$ " " " " " " " " **1.75.**
 Cheaper than plate.

STERLING SILVER SEAL.



No. 7098. each, **\$1.40.**

STERLING SILVER COLLARETTE.

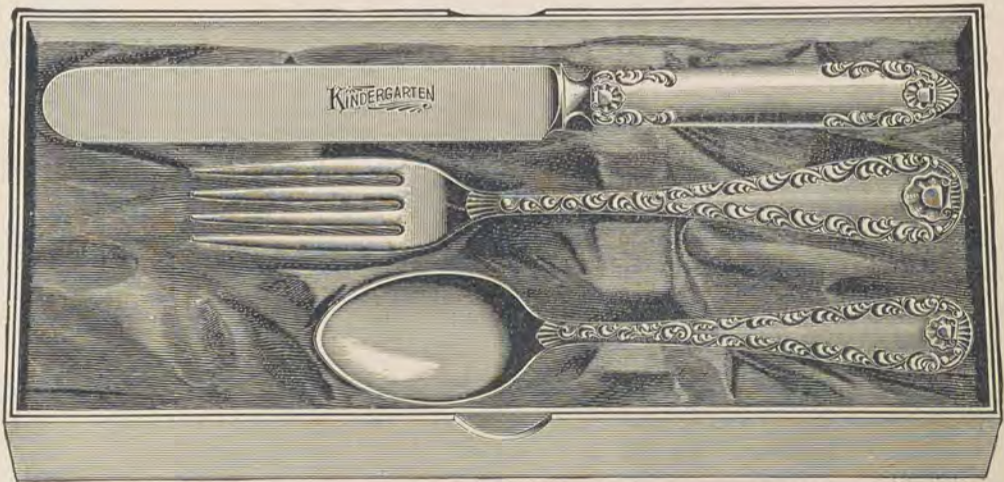


No. 7. Collarette, each, **\$2.00.**
 No. 6. Collarette, longer and wider, **2.50.**



No. 5. Collarette, each, **\$1.00.**

A NEW CHILD'S SET, AND CHEAP.



No. 103. Per dozen sets, **\$9.00.**
 The Knife is silver-plated on steel. The Spoon and Fork are silver-plated on nickel silver. The quality is good, the pattern new and handsome, and the price is away down.

Our 600-page Catalogue is full of goods which sell. Silver Novelties not sent on selection.

Wholesale Only.

LAPP & FLERSHEM, Chicago.

A. H. REVELL & Co.

431 to 437 Fifth Ave., Chicago



Latest Improved Show Cases **DUST-TIGHT**

Patent Drop Doors, with Lock.

Wall Cases, Cashiers' Desks, etc.

Our goods are the best for the money.

Write for our Jewelers' Catalogue and Prices.

MENTION THE KEYSTONE

Jewelers' Auctioneer

Terms made satisfactory.

Jewelers, Be Careful!



You are not selling your goods for the sole benefit of the auctioneer. Therefore do not permit yourself to contract the selling of your stock without being positive the auctioneer can secure good profits.

It will pay you to scrutinize very carefully in that respect, and also inquire of the last employer, before making your selection, as you will positively find before the public many auctioneers lacking that great accomplishment, and many deceptions egotistically printed in many instances. I speak from experience, being posted, and conducting sales for the last fifteen years, and I therefore base my statements on solid foundations. I take great pleasure in referring you to

J. B. MAYO & CO., Palmer House, Chicago, Ill.,
SHANDREW & CO., Chicago, Ill.,
HENRY S. AISTEN & CO., Chicago, Ill.,

M. EPPENSTEIN & CO., Chicago, Ill.,
VON HORN & CO., Chicago,
A. L. HOSMER & CO., Kansas City, Mo.,

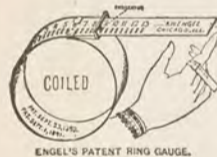
and many wholesale and retail jewelers throughout the United States, too numerous to mention, in regard to large profits made and conducting sales in general.

A GOTTLIEB,

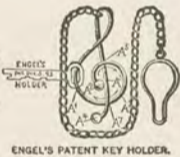
153 South Clark St., Chicago, Ill.

Established 1880

A. W. ENGEL & CO. 85-87 DEARBORN STREET, CHICAGO, ILL.



MANUFACTURERS OF
ENGEL'S PATENT KEY HOLDER
ENGEL'S PATENT RING GAUGE
IMPORTERS AND WHOLESALE JEWELERS
AMERICAN WATCHES, DIAMONDS, JEWELRY, SILVERWARE,
WATCHMAKERS TOOLS AND MATERIALS
WATCHMAKERS FOR THE TRADE
85-87 DEARBORN STREET, CHEMICAL BANK BUILDING



FREE! 100 ENGEL'S PAT. RING GAUGES

WITH NAME AND ADDRESS.
A FINE BUSINESS CARD FOR JEWELERS.
SAMPLE 10 CENTS.

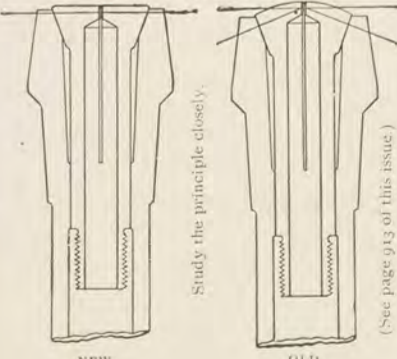
Cash purchases to the extent of \$100 will entitle you to this offer of ours. **SAVE YOUR BILLS!** No matter how small the amount of your purchases, if you continue to buy of us they will soon amount to \$100, which secures **100 Gauges, FREE.** A fine and useful business card. Can furnish you with anything in the jewelry line at prices as low as any one. Try us.

We're working nights—have been some time.

G. W. Marquardt & Sons,
Columbus Memorial Building,
Chicago.



DALE CHUCKS.



The flat-face chuck for watchmakers is original with us. It is the only scientifically designed chuck ever placed on the market. It entirely eliminates the element of spring, which is the great drawback to the round-faced chuck, which puts inside bearing outside of spindle in all small numbers. *Short work* has the same effect. We make them to order for all lathes, from 3 to 20, full and half sizes, and carry them in stock for W. W. and M. 1x2 and 2. Made only by **HARDING BROS.**, successors to Horological Tool Co., 1036 Lincoln Ave., Chicago.

Beach & Co. Manufacturers of Watchmakers' Tools



NOTICE OUR OTHER SPECIALTIES: Staking-Tools, Pivoting-Tools, Staff-Measure, Wheel-Tuning Calipers, Roller-Jewel Setters, Milling-Tools, Adjustable Clock-Spring Winder, "used to reclamp mainspring when click is broken and spring run out," Pivot-Drills, Soldering Tweezers, Etc., Etc.

At the low figure of \$6.00, complete.

We are specially prepared to furnish estimates on all tools pertaining to the trade.
SEND FOR CIRCULARS. 46 Clifford Street, Detroit, Mich.

Jewelers, Watch Dealers, Silversmiths,
Opticians requiring Buying or Selling
Agent for Europe,

should communicate with
FREDERICK POWELL,
22 Thavies Inn, London,

who has over twenty years' experience as wholesale buyer. Can introduce novelties to Europe and Colonies.

Grandfather Clocks FOR SALE.

I recently bought a few fine, old eight-day grandfather clocks, with moon and calendar. Movements, dials and cases in excellent condition. For description, prices and photographs, address

S. R. STIBGEN,
ESTABLISHED 1866. MARIETTA, PA.



When writing to advertisers, kindly mention *The Keystone.*

Chicago News.

The retail jewelry stores throughout the city, especially along State Street, have already put on their holiday robes, and there will be some lively competition for the December trade. The early part of the month the knowing ones are out getting their Christmas purchases made while the stocks are full, and will not put off buying until they have to take what is shown them. The dry goods department houses are putting in big stocks of silver novelties and jewelry, and are making big efforts to draw that trade. If ever they get enough it is to be hoped they will be satisfied.

From a gaze into the big State Street windows, one is impressed with the largeness of pocket books for ladies' use. They grow larger and larger, and it won't be long until they make the chatelaine and shopping bag needless. Snake and lizard skin continue to hold first place, with very little or no decorations, the leather itself as now manipulated being quite showy enough. A large, nearly square book, of fine seal leather, shows a narrow, embossed silver binding around the flap, with monogram of very large, fancy letters in the center. Another has large corner decorations of graceful wheat stalks and leaves, with initials of cut silver running diagonally between.

At the regular monthly meeting of the Chicago Jewelers' Association, held November 27th, in its rooms in the Columbus Building, the committee on closing, C. H. Knights, chairman, recommended closing the entire days of Thanksgiving, Christmas, New Year's Day, Washington's Birthday, Decoration Day, and Fourth of July; also to close at 5.30 P. M., from January 15th to September 1st, and at noon on Saturdays from April 1st to September 1st. In an emergency requiring special action the committee will meet and submit a recommendation to the Association. The Association adopted the plan, and its members will hereafter close their offices at the time recommended. No other business of importance was transacted.

Here is something from Uncle Sam that should interest our city readers as well as the trade at large. Recently postmasters have been misconstruing the regulation of the Post Office Department as to addresses on postal cards. Because of these addresses being on the message side they have refused to allow the matter to go through the mails. To correct this, an order has been issued at the Post Office Department instructing postmasters as follows: "No printing or writing other than the address is allowable upon the address side, nor may anything except an address label be pasted or attached to any postal card. The address label, however, may be pasted on the message side as well as on the address side of the card."

U. E. Penney has purchased the interest of L. E. Winslow in the Winslow & Penney Company, trade repairers, in the Masonic Temple. The firm name will remain the same. This Company does all kinds of watch repairing for the trade, and it announcements will be found in our want columns.

Here is what THE KEYSTONE man ran across the other day: "I believe it will pay any firm to advertise in the trade papers, provided they do it right," said a prominent young jobber a few days ago. "I don't believe it is the right kind of advertising to blow in a little money once in awhile, just for the sake of advertising, but that the best plan is to spend so much per year, whatever the business will warrant, and keep the announcement continually before the trade; and until the time comes that our firm decides that I have the right understanding of the matter, I shall oppose any expenditures for this picayunish 'try-it-awhile' kind of advertising."

In business, different men employ different methods. Success is the goal sought for, and each man paves his own road with his own peculiarities. There are those who borrow much and risk much. These succeed only when their schemes and calculations work out satisfactorily. Others cannot be induced to go in debt, and yet it seems their success is no more assured than their speculative neighbors. In no instance could set rules be applied. Tact and ability enter largely into each one's successes. This is about how it appears to those on the "outside" of the goal. But listen to how a well-known jobber painted the "inside" to THE KEYSTONE representative the other day. It's a case of look at this and look at that, pay your money and take your choice. Said he: "The happiest man is he who has a moderate salary, and has no business cares to annoy him, but goes to a cheerful home, rest and recreation after his day's work is over." There is much truth in the jobber's view; the same can be said of the first view. And yet the man who dares to be poor until he can honestly be rich, who is true to himself in word and deed, who is not afraid of

hardship and reverses, nor unduly elated over prosperity, and is gentle, loving, courageous and hopeful, is the only truly happy and fortunate man.

Wendell & Co., of the Champlain Building, have recently fitted up their office room with handsome oak furniture. Excellent taste has been displayed in arrangement and design, giving the office an attractive and handy appearance that is pleasing to the eye. This firm report a thriving trade, especially in their silver lines, and are expecting a more brisk business for December.

The A. M. Rothschild Company Department Store is the style of a new enterprise which has recently been incorporated here, with a capital stock of \$750,000. They are to occupy the new eight-story Commercial Building now being erected by the syndicate headed by A. L. Sercomb, of the Meriden Britannia Company, at the northeast corner of State and Van Buren Streets. Of course this new store will have an extensive retail jewelry department. The establishment will be unique in many respects, and will be planned somewhat after the London establishment managed by Whitely. Mr. Rothschild is also an enthusiastic supporter of the methods used in conducting that great mercantile mart, the Au Bon Marche, of Paris. Mr. Lazarius, of "The Fair," has been offered and has accepted the general management of the new store. Nelson Morris, the big stock yards capitalist, father-in-law to Mr. Rothschild, is one of the main stockholders of the new Company. This Company have made fifteen-year leases on the property, from the above corner on State Street north to the corner occupied by Spaulding & Co., jewelers. The entire block, with the exception of the forty-foot frontage used by Spaulding & Co., is practically formed into a single holding. The leases on 160 feet of this property run from May, 1895, while on the remainder of the frontage the leases take effect May 1, 1896. The series of leases, considered as one transaction, is only ranked in the history of downtown renting by the lease of the big Leiter Building, now occupied by Siegel, Cooper & Co. In the present case, however, a large number of owners were involved, making the transaction much more complicated.

W. H. Dietz is now issuing the fourth edition of his popular monogram book for engravers, which he advertises elsewhere in this issue. Those interested should not fail to send to Mr. Dietz for this useful and helpful book.

"Here is a new kick," said a well-known traveler to THE KEYSTONE man. "New to me at least, and I want to tell you about it. I was talking with a Michigan jeweler recently, and he delivered himself in this manner: 'Do you know it, Christmas comes in the wrong time of year for we jewelers and I'll tell you why. First it comes at tax time, and second winter has just started in and the people have spent all their money preparing for it. Now if the holiday season only came in July we jewelers would have a harvest at harvest-time that would be a harvest.'"

Lapp & Flershem have made a reputation of their own. In season and out of season they have kept their title of the "Busiest House in America" steadily before them until now it is an accepted fact. If there is one thing of which the trade is fully assured it is that Lapp & Flershem can be depended upon absolutely to fill orders promptly, accurately and with reliable and standard goods. The present season finds them with a larger and more complete stock than at any other time in their history. They do not propose to be out of goods in the holiday season when the trade want their orders filled right on the dot, and have laid their plans accordingly. They are better than ever prepared this season to fill your orders, and you run no risk in sending them your mail favors during the holiday rush.

The house of C. H. Knights & Co. have a proud distinction as diamond importers and dealers. With this as the foundation, and liberal dealing and popular prices as the superstructure, there is no wonder that thus they have maintained an enviable prestige in the diamond business in the West. They have enjoyed an excellent trade in this line the past month, selling some really good bills. One sale was noteworthy—a pair of well-matched brilliants at \$1600. Mr. Knights informs us that they are busy in all their departments now, and expect to be more so during December, but that if you want your diamond orders in the twinkling of an eye, send to them. In other words, "If you want a thing done quickly, take it to a busy man."

In a chat with R. McDougall, the hard-working and energetic manager of L. Manasse's optical establishment, he reported their trade as being very satisfactory indeed. Business, he said, seemed to be running largely in the line of their specialties, as found in their half-page announcement elsewhere in this month's KEYSTONE, an indication of the strength of the organ of the jewelry and optical trades as an advertising medium. The trade are invited to consult the advertisement in another page.

The reception which has been accorded the handsome new catalogue of G. W. Marquardt & Sons has been very flattering to the firm. Since it has been issued orders have poured in upon them in such quantities that when THE KEYSTONE representative called yesterday, Mr. Marquardt, Jr., informed him that they were completely "snowed under." Said he: "Not only have we our hands full in the daytime, but our full force have been compelled to work nights to keep up. It looks to us as though the trade were appreciating the advantages offered by our catalogue and were availing themselves of them. Business with us can truly be said to be rushing."

The wide-awake, up-to-date, and reliable firm of Goldsmith Bros., the widely-known refiners and assayers, sends its greeting this holiday season to the readers of THE KEYSTONE in a double-page announcement. It will be noticed they give prominence to their friends, and that their friends speak well of them. The reason they stand so well with their friends is they treat them well. For this reason these same friends do not hesitate to recommend the firm to the trade at large. Should you have any old gold or silver for shipment, by all means send it to Goldsmith Bros.

The familiar and reliable firm of Benj. Allen & Co. sent out to the trade the middle of October, their very handsome and comprehensive jewelry catalogue of 800 pages. It is needless to say that it illustrates and describes everything that may be imagined in the way of the needs of the jeweler. Though an expensive book it is sent express free to all regular jewelers. Mr. Allen desires to announce to the trade that they will be glad if all dealers who are entitled to their catalogue, and have not as yet received it, would send them a request for same, and they will be pleased to forward it. This specially applies to jewelers who have recently embarked in business and new firms just starting up. A letter will bring all such the great Benj. Allen & Co. catalogue. This firm also publish the largest and most complete tool and material catalogue before the trade, which will also be sent upon request to regular jewelers.

"Pixley's Lens-Measure" is a recent invention in the optical line which is bound to jump into popular favor at once for the reason that it is simple, accurate, practical, and is sold at much more moderate price than other lens-measures. It is being manufactured by F. A. Hardy & Co., of this city, and will be put on the market at once. Mr. Pixley, the inventor, is a member of the traveling force of this firm, and has displayed a considerable inventive skill in this handy and most complete instrument, which THE KEYSTONE will illustrate and describe in our next issue.

The Union Show Case Company, of 169 Randolph Street, Chicago, have lately made a handsome walnut outfit for Jeweler H. C. Kachlein, Lafayette, Ind., and likewise for Haney & Pierce, of Belleville, Kan., which went to their new store which they are opening up at Moberly, Mo. The Union Company report an active demand for their fixtures the past month.

Manager Corey, of the Chicago office of the Pairpoint Manufacturing Company, takes a great deal of pride in showing and talking the beauties of his Company's new product, known as the Crown Pairpoint French china. This is pardonable upon Mr. Corey's part, for the new line has a refined beauty and exquisite elegance that are most refreshing. The display of this new product at the Company's Chicago store, 224 Wabash Avenue, is simply superb, and the visiting trade will miss a rare treat should they fail to see these highly artistic productions of American art and up-to-date energy when in town.

We would like to call the attention of manufacturers in the jewelry and kindred trades to the card, elsewhere, of Frederick Powell, 22 Thavies Inn, London, England. He desires to act as selling agent for American manufacturers in these lines, who desire to reach the European trade and also that of the British colonies.

Intending students in the art of engraving should not fail to read the announcement of the Jewelers' School of Letter and Monogram Engraving, Chicago, which appears elsewhere. Prof. R. O. Kandler, the principal, informs us that students can enter at any time, and that the usefulness and success of his plan of instruction are more apparent than ever. Particulars can be had by addressing the principal.

While during the dullest season in business circles many jobbers found trade slack, A. C. Becken, of the Columbus Memorial Building, Chicago, has had no complaints to make. For several months past his trade has been active, and now with the approaching holiday season orders are pouring in at a rate that makes things hum about his establishment. Your attention is called to his page of "scorchers" in bargains found in this issue. You will find some bargains there that will be trade-makers for you during this month. (Continued on page 961.)

Philadelphia Notes.

Gift purchasers are now on the alert, and the pretty things in jewelry store windows are being scanned with an envious and discriminating eye. Actual purchases so far are by no means voluminous, but the next three weeks are expected to give a remunerative account of themselves. It is worthy of note that the windows, even in the most unpretentious stores, are unusually attractive, the bulk and variety of stock showing much confidence, and its arrangement excellent taste. Wholesalers report a fair business.

The handsome \$1,000 silver set, of three hundred pieces, presented to ex-Assistant Postmaster Henry A. Drake, by the post-office employees of this city, was furnished by Louis A. Scherr & Co.

Edward B. Fox, till lately vice-president of Queen & Co., of this city, has started in business for himself in room 408, Hale Building, 1326 Chestnut Street. He is limiting the sphere of his operations to filling oculists' prescriptions for glasses, adjusting and repair work.

The mention of holiday trade suggests opera-glasses, which in turn reminds us that Queen & Co., of this city, will send selection packages of these goods to any reputable jeweler.

Geo. W. Long, 118 South Seventh Street, has been given the Pennsylvania agency for the United States Watch Co., Waltham, Mass.

C. R. Smith & Son have announced that they will sell out and retire from business.

Jos. B. Bechtel, formerly with Dalsheimer Brothers, has purchased the business of Henry Struntz & Co., jobbers in watchmakers' and jewelers' supplies, at 719 Sansom Street.

Simons, Bro. & Co. distributed a handsome calendar of rare design on Thanksgiving eve.

John Brownley, formerly with F. D. Klemmer, has opened a store at 1530 South Second Street.

Herman E. Christ has removed his business from Frankford Road to 1511 South Second Street.

Louis Sickles, of M. Sickles & Sons, 618 Chestnut Street, has been confined to his home by illness. THE KEYSTONE is pleased to announce that he is rapidly convalescing, and expects soon to be able to attend to business as usual. Sol. Sickles, of this firm, is on the road, and reports trade good.

Jos. S. Hughes, of L. A. Scherr & Co., who recently returned from a business trip through this State, has gone South on the same mission.

Charles J. Weston has opened a shop for the manufacture and repair of jewelers' tools at 713 Sansom Street.

The Jewelers' Club gave a musical "smoker" on November 27th. J. H. Kelly, James A. Barry and A. G. Lee were the committee in charge.

Simon C. Levy, 1817 Ridge Avenue, has fully recovered from his recent attack of tonsillitis, and is busying himself with bait for holiday trade.

Geo. Mayer, of the firm of Geo. Mayer & Co., dealers in optical goods, at 108 South Eighth Street, has been confined to his home for the past five months with lung trouble.

P. Fries & Son, formerly in business at 541 North Second Street, dissolved partnership some time ago and retired from business. The firm had been in existence since 1859.

Chicago News.

(Continued from page 960.)

The body of M. Gilbert Lindsey, a salesman employed by Hyman, Berg & Co., the well-known retail house, at State and Washington Streets, was found in Lake Michigan, at the foot of Ninety-ninth Street, on the morning of November 21st. How it came there was a mystery at first, but it is now generally conceded that it was a case of suicide.

The guessing contest inaugurated by G. W. Marquardt & Sons over their trade-mark, is proving mighty interesting. Nearly a thousand guesses have been received already, and before the contest closes—December 10th—it is expected there will be another thousand. The winners will be announced on this date.

Manager Corey, of the Chicago branch of the Pairpoint Company, smiles when you ask about business in their cut glass department. Their factory has been working overtime since last August, but is still behind on orders. This he accounts for from the fact that cut glass is a growing and popular line among the jewelry trade, and is to a degree taking the place of silver-plated ware.

Manager Jewett, of the Chicago branch of the New Haven Clock Company, is now displaying a handsome holiday line of music boxes which they have lately received.

The Chicago Engravers' Association was organized the early part of the month for the purpose of upholding prices for work, and for the welfare of that trade in general. At their last meeting, on the evening of November 19th, in the room occupied by Kandler's Engraving School, Columbus Memorial Building, there was a full attendance of the members. It was unanimously decided to incorporate, and a committee was appointed to look after the charter. By-laws and constitution were also adopted at this meeting. The vacancy in the office of vice-president was filled by the unanimous election of John B. Wiggins. The Association contemplates taking in both employees and employers. The headquarters will be in the Columbus Memorial Building, and meetings will be held every Wednesday in the rooms of the Chicago Jewelers' Association until another room can be secured in the same building. Martin B. Stecher is president; John B. Wiggins, vice-president; W. H. White, secretary; C. H. E. Boughton, treasurer. The following engravers and manufacturing jewelers are members of the new Association: Engravers: W. H. White, John B. Wiggins, Chas. A. Norton, Martin B. Stecher, L. Hadorn & Co., Herman Bischoff, C. H. E. Boughton, Louis Kasten, Richard H. Kandler, H. R. Gentsch, L. G. Bone and C. B. Smith. Manufacturing jewelers: Juergens & Andersen Co., G. W. Hook, Spies & Co., Robert M. Beygeh & Co., J. Milhening, R. M. Johnson, Wendell & Co., C. H. Bisson Co., and De Lacy Mfg. Co. "Organized effort on the part of these leading firms," says Secretary White, of the Association, "will result in benefit to all."

Jewelers' Council, 316, National Union, held their first grand ball at their hall, 210 and 211 Masonic Temple Building, on November 17th last, which was under the management and supervision of President W. J. Meyer, and to him the Council are indebted for the great success. The ball opened with a grand march at nine P. M., and dancing was continued until about twelve o'clock. It was the intention of the Council to hold a dance every month, but owing to the busy Christmas season the next one will be held the second meeting in January next. Among those present were the following: Mr. and Mrs. C. E. Hodge, Mr. and Mrs. Harry Sax, Mr. and Mrs. H. M. Bullwinkle, Mr. and Mrs. F. McGredy, Mr. and Mrs. Solomon Levy, Mr. and Mrs. Jameson, Mr. and Mrs. F. H. Booth, W. J. Meyer, Dr. G. N. West, J. T. Campbell, C. A. Barnes, Otto Stumpf, J. Bachner, S. D. Gould, A. M. Johnson, B. Volk, C. G. Tollefson, H. E. Farquharson, J. C. Heinhold, R. McNulta, Carl Hirt, R. A. Bigelow, George Yott, Walter Kreitling, F. A. LeGros, T. Kidd, H. S. Winters, Misses Harrison, Miss Farquharson, Miss Kreitling, Miss Levinson, Miss Hancock, Miss Wilson, Miss McDonald, Miss Virtue, Miss Ebersole, Mrs. Smith, Mrs. Melms, Mrs. Burritt, Mrs. Wenke, and others.

Kansas City Notes.

Time is passing quickly and only a few weeks more remain to prepare for Christmas. As usual at this season of the year, out-of-town dealers are finding their way to the city, looking after goods suitable to their holiday trade, and these visitors will be more numerous just after Thanksgiving. Our jobbers are anticipating a busy time from this holiday right along up to Christmas. There is every indication that our retailers will do a fairly good holiday business, an improvement upon that of last season at least.

Mrs. Eugene Jaccard gave an elegant reception at her home the early part of November. A very large number of guests were entertained during the afternoon. Among the ladies of Kansas City's jewelry colony who were present were Mrs. M. F. Barger, Mrs. Charles Hofer, Miss Nadine Jaccard, Mrs. H. B. Carswell, Mrs. D. C. Pruden, Mrs. S. E. Woodstock, Mrs. G. O. Jaccard, Mrs. H. N. McKean, Mrs. C. C. Olmstead, Mrs. R. J. Gilbert, Mrs. C. B. Norton.

E. S. Kimber has moved from the store 1080 Union Avenue, and is now located at 538 Main Street.

The Meyer Jewelry Company has added to its stock a very fine line of fancy band and plain rings.

A. A. Ditter has begun a watchmaking and jewelry business at 1411 Grand Avenue, Kansas City, Kan. Mr. Ditter was formerly with L. Kieffer.

W. H. Fitzsimmons, formerly with Henry Boehm, of Denver, Colo., is with Cady & Olmstead.

The Barr Jewelry Company has moved from 1019 Walnut Street into room 405, Hewson Building.

Ed. House, formerly of Manhattan, Kansas, is clock-maker for C. E. Russell.

Bert Zimmerman has left Chas. Harsch, and gone home to take an interest in his father's jewelry business at Warrensburg, Mo.

Items of Interest.

The Hall staking-tools, manufactured by F. L. Herrick, Roxbury, Vt., stand in high favor with the trade. The large number sold is conclusive as to the opinion entertained of them by practical jewelers.

Elsewhere in this issue, W. F. A. Woodcock, Winona, Minn., the noted instructor in watchmaking and kindred branches, has something to say that will prove valuable to intending watchmakers. Hundreds of highly successful watchmakers owe their good fortune to Mr. Woodcock's thorough instruction.

In the announcement of Parsons' Horological Institute, on another page, will be seen a cut of a very effective and moderately priced wheel-cutter, which can also be used for milling and many other purposes.

A recent weekly batch of arrivals at Trowbridge's School of Watchmaking, Winona, Minn., comprised Rush Clapp, C. R. Howe, Nashua, Iowa; Carl Toft, Menomonie, Wis.; B. A. Benson, Glenwood, Minn.; and Clarence Moore, Winona, Minn.

Czarina ornaments in silver are the very latest fad, and it is a foregone conclusion that they will have a rapid sale among ladies. J. T. Scott & Co., 4 Maiden Lane, New York, are showing an elegant assortment of these goods, and a host of other novelties in sterling silver. They are also showing an attractive assortment of silver-mounted shell hairpins and side combs.

The trade will no doubt remember that E. Kirstein's Sons Co., Rochester, N. Y., some time ago instituted a suit against E. J. DeCelles, of Southbridge, Mass., for making a four-bar spring which, it was maintained, infringed on the Kirstein three-bar spring. The infringement of the spring was subsequently acknowledged to the defendant and a permanent injunction filed. E. Kirstein's Sons Co. are now selling this spring to the trade, and warn all against selling any other spring having three or more bars.

S. F. Davidson, Fulda, Minn., is the inventor of an ingenious tool rack, the use of which would save much time to the practical watchmaker. In a little while the workman can lay his hand on any tool with the ease with which a professional piano-player can find a particular key.

Literary Notices.

"The Watch-Adjuster's Manual," a handsomely bound volume, is the latest acquisition to the watchmaker's library. It is a practical guide for the watch and chronometer maker, repairer and adjuster in making, springing, demagnetizing, examining, correcting, timing, and adjusting for isochronism, positions and temperatures. "Excelsior," the competent author, was formerly a member of the British Horological Institute, London, and has written quite a number of works of great value to watchmakers. The manual can be had through this office for \$3.50, the publisher's price.

There are very few people in this country who do not know something of the beautiful and appropriate Christmas cards and holiday publications of Prang & Co. The beauty, originality and elegance of their designs have captivated the public, and caused them to be the most favorite medium through which to convey an expression of holiday greeting and good feeling to loved ones wherever they may be. The inventive ingenuity of this famous house suffers no abatement, and for the season of 1894 and '95 a list of incomparable excellence is offered. The day of ostentatious gift-making is nearly spent; there is a growing tendency to avoid the vulgarity of gifts which simply represent excessive cost; the really artistic productions of Prang enable friends to give uncostly but beautiful gifts that have meaning. The line is distinctively American. The original designs were executed by foremost American artists, and lithographed and printed by American artists and artisans in their fine art establishment in Boston, under their personal supervision. No greater credit can be given than to say that the holiday publications are a marked advance on the high records of previous years. These holiday publications are sold by all the leading art dealers, booksellers and stationers in the United States and Canada, and may be obtained through them or purchased direct from the publishers, L. Prang & Co., Boston, Mass.

The compact little catalogue of Tiffany & Co., New York, widely known as the "Tiffany Blue Book," was out earlier than usual this year, and is handsomer and more complete than ever. An effective new cover design, with a rich, deep-blue background, makes the little volume very attractive. The catalogue is one of the most sought-for of publications of this character issued, as it is a practical business catalogue, compact in form and concise in text, with no lavish description, no illustrations, and not a superfluous word in the entire 279 pages.

THE RING OF YEARS:

"Give me Ostby & Barton rings, or give me none."

Diamonds and Diamond Jewelry

not advanced in price

You can save **15%** by buying your fall stock now.

Having imported a large stock of Diamonds, we will not advance any of our prices at present.

Dealers making their selections now will have the advantage of the low tariff prevailing on Diamonds before the Wilson bill went into effect.

Our stock of Loose and Mounted Stones is unusually complete. Write for selection package.

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Actual Size.

A. WITTNAUER

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Manufacturer and Importer of Watches

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Watches of all sizes

Watches of all kinds

Watches cased in all styles

Movements of all sizes

Movements of various grades

Movements fitting ready-made cases



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Specially Adjusted, 21 Jewels, Railroad Movements,

Fitting Ready-Made Cases, a Specialty.

WRITE FOR SAMPLES AND INFORMATION.

Finished Watch Materials for Longines and Agassiz Watches constantly on hand.

Union Show Case Co., Makers of Artistic Jewelers' Store Fixtures



Interior section of F. Lorenze's Store, West Twelfth Street, Chicago, recently fitted up by us.

167 and 169 East Randolph Street, CHICAGO

SEND FOR OUR NEW CATALOGUE, JUST OUT

Arts Allied to the Jewelry Trade.

LV.



THE small electro-magnet we described in November, 1894, KEYSTONE, can be used to charge our needle, illustrated at Fig. 4 of August, 1894, KEYSTONE. The *modus operandi* of charging consists in drawing the needle over the exposed poles of the electro-magnet, as illustrated at Fig. 1, where *A* represents the electro-magnet, and *B* the needle. Applying the needle to one of the poles of the magnet near the center of the needle, the needle is drawn away in the direction of the arrow *a*, repeating the process several times. Then changing ends of both needle and electro-magnet, repeat the operation with the end *B'* of the needle.

It is to be supposed the center *b* of the needle *B* is jeweled and constructed as was described in September and October, 1894, KEYSTONE, and that it turns freely on its pivot. The cover, or box, described and illustrated at Fig. 4, October, 1894, KEYSTONE, should also be in place.

We next require a balance, or scale, sensitive to $\frac{1}{100}$ of a grain. Such scales are of so much importance to the jeweler that we will dwell carefully upon the construction of such scales, not only as relates to details of construction, but also as to the mechanical principles involved in scales of precision. To understand the principles involved in balance scales, we refer to Fig. 2, where the bar *D* is supposed to represent the beam of a pair of scales. Subsequently we shall consider the best form and material for such a bar, or beam; but for the present, we will only take thought as regards the mechanical construction and arrangement of the parts. Suppose on the bar *D* we draw the line *c* through its center and parallel with its longest sides. At right angles to this line, and also through its center, longitudinally, we draw the line *e* and establish a pivot, or bearing, which, theoretically, conforms to the mathematical definition of a point, which is, "A point has position, but not magnitude."

At Fig. 3 we show a view of Fig. 2 seen in the direction of the arrow *j*. In this diagram, the dotted line *e* is supposed to represent this supposed imaginary axis. Now, the nearest realization we can have, mechanically, to such a theoretical bearing, is a knife edge. The best balances on the market have such knife edges of agate, acting on agate surfaces. While it would be possible for a skillful workman, although but an amateur in balance-making, to grind and polish such agate edges, still edges carefully made of hardened steel can be constructed, which will be sensitive to $\frac{1}{100}$ of a grain, with two ounces in the pans.

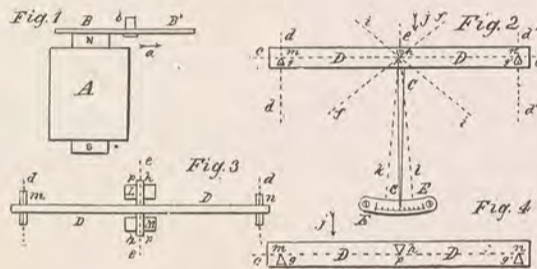
To further consider the principles involved in a balance of this kind, let us further place similar theoretical bearings at the intersection of the lines *d* and *d'* with the line *c*. Such intersections establish points at equal intervals and in a right line, and if we conceive of these intersections as being points or bearings, as referred to above, we can get a good idea of what is required in the beam of a fine balance. But to further aid in getting a full comprehension of the important principles involved in such a balance, we refer to Fig. 4, where we reproduce the beam *D* of Fig. 2, with some of the parts shown in Fig. 2 removed.

In Fig. 4 we show knife-edge bearings at *g* *h* *g'*. The central edge *h* is supposed to rest on some support at each end, as shown at *L M*, Fig. 3, which is supposed to be a view of Figs. 2 and 4 seen in the direction of the arrows *j j*, except the form of the knives is omitted, and the bearings are represented by the dotted lines *d c d'*. If the bar, or beam, was of equal size and weight from end to end, and it was poised on the imaginary line *e*, resting on *L M*, the beam *D*, if moved around the axis *e*, would rest in any position in which it was placed, as indicated at the dotted lines *i i* and *f f*.

If we substitute for the imaginary pivot line *e*, the knife edge *h*, the beam would still poise when placed perfectly horizontal, but in theory the weight of the knife *h* would pass all to one side, and the beam fall in the direction of the initial movement.

The Theory of the Beam Balance Considered

If we should attach to the beam *D* a light bar, or needle, as shown at *C*, which hung directly down, the weight of such pendant would tend to keep such beam perfectly horizontal. Now, it is easy to understand that if the knife edges of the support *h* were very sharp, and rested on an extremely hard substance, but little weight would be required in



the pendant *C* to keep the bar *D* horizontal; it will be further evident that if the loose end of the pendant *C* is brought to a fine point and provided with an index arc, as shown in *E*, Fig. 2, that any weight applied to either end of the bar *D*, say suspended from the point *n* by the line *d''*, Fig. 2, would cause the needle *C* to move to the left of the zero mark on *E*, such movement being in proportion to the weight of the pendant *C* and the weight suspended by line *d''*.

A careful consideration of the facts pointed out will show us that we have the means at our disposal of making a balance which will betray a very slight excess of weight pending from either the point *m* or *n*. A further factor in our balance problem should be considered, which is the effect produced by not having the edges of *g*, *h* and *g'* in perfect alignment. Our space forbids present consideration, but will be taken up in our next issue.

His Conscience Troubled Him.

THE KEYSTONE. CLAYTON, IND., November 11, 1894.

GENTLEMEN:—Verily, this *is* too much. I had persuaded myself that I could not afford to spare the dollar for next year's KEYSTONE, but my conscience for the past two weeks overcame me. I yield with a graceful obedience. Enclosed find my dollar.

Yours, for a "Non-pull-out,"

J. SHERRY JONES, Jeweler.

An Expert's Opinion.

Makes no difference what your business is, in order to get rid of your wares, whether potatoes or poetry, dry goods or legal advice, peanuts or paragraphs, you must get your name into everybody's ears and eyes, and to do this there is nothing like original newspaper advertising. Inventiveness, adaptability, promptness of decision, must direct your blows, and if you can't find markets, make them. Dart at new ideas that will buoy you above the waves of the commonplace, as a hungry robin pounces upon the belated worm.

—Jed Scarboro.



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For further information, application blanks for membership, by-laws, etc., address

P. O. Box 3277. 170 Broadway, New York.

The regular monthly meeting of the executive committee was held at the Alliance office on Friday, November 9th. There were present H. H. Butts, chairman; A. K. Sloan, president; J. B. Bowden, vice-president; Bernard Karsch, treasurer; Messrs. White and Wood, and George H. Hodenpyl, secretary.

The following were admitted to membership: H. W. Carroll, Bennettsville, S. C.; Jules Renaud & Son, 621 Main Street, Keokuk, Iowa; Frederick B. Nourse, corner Court and Main Streets, Cortland, N. Y.; Waltham Jewelry Co., 183 Moody Street, Waltham, Mass.; Carl L. Rost, 207 East Main Street, Crawfordsville, Ind.; Watson, Newell & Co., Haywood Building, Attleboro, Mass.; H. E. Adams, Sanford, Fla

Thoroughly Practical.

MARENGO, IOWA, Oct. 21, 1894.

DEAR KEYSTONE.—When I see anything that would interest the craft I take pleasure in making it known to them through the columns of THE KEYSTONE. Having had business in a few small towns, I was not only surprised, but thunderstruck, to find catalogues of as fine firms as there are in the country—at least recognized by the trade as such—lying on the counter, with the discount attached, in drug, dry goods and clothing stores. On some of the books was written, "We send catalogues to legitimate jewelers only," and I am positive neither of the stores had more than fifty dollars' worth of collar and cuff-buttons and a few spectacles. Nay, I even came across jewelry papers and journals which claim they are the "only jewelers' organ." Now, who is in fault? The jewelers' organizations don't seem to follow the right path, or don't care apparently except to meet together and have a good time. But, brother jeweler, it is getting serious. I will endeavor to explain the fault and remedy, and would like THE KEYSTONE and all jewelers whom this may interest, to act and join hand to hand until we will subdue the evil.

The fault of all this is the jewelers' mailing list. I don't know how, or when, or why, these names got on the list, but they will never be overlooked, and it is our duty to see that they are off the list and revise same. They say money is at the root of all evil, but it must have root in order to grow. My suggestions would be for THE KEYSTONE to appeal to all manufacturers and jobbers, and all who are in favor of my plan, to send to THE KEYSTONE as much as they see fit for the work, and when enough has been collected to hire able men to go through the towns and find out whether a man is entitled to the privileges of the legitimate jewelry trade or not. We can make a limit of how much goods a person has to carry in stock to make him a legitimate jeweler without being a workman himself, or hiring one; and after the new mailing list is made up, if some of those dropped think we have misused them they can appeal to a committee which should be appointed for that purpose.

I hope to see some action taken, and I will start the list with five dollars, and trust others will give accordingly.

I am, for the trade,

SAMUEL LEVIN.

The Detached Lever Escapement.

XXVII.



Using the little instrument for determining angular motion, described in November KEYSTONE, care must be taken that the spring clamp which embraces the pallet-staff does not slip. In order to thoroughly understand the methods of using this angle-measuring device, let us take a further lesson or two. In our November, 1894, article we spoke of measuring the amount of lock on each pallet, and advised the removal of the balance, because if we left the balance in we could not readily tell exactly when the tooth passed on to the impulse plane; but if we touch the fork lightly with an oiling tool or a hair broach, moving it (the fork) carefully away from the bank, and watching the arc indicated by the hand *A*, Fig. 2, November, 1894, KEYSTONE, we can determine with great exactness the angular extent of lock.

The diagram at Fig. 1 illustrates how this experiment is conducted. We apply the hair broach to the end of the fork *M*, as shown at *L*, and gently move the fork in the direction of the arrow *i*, watching the hand *A* (see November, 1894, KEYSTONE), and note the number of degrees, or parts of a degree, indicated by the hand as passed over before the tooth is unlocked and passes on to the impulse plane and the fork flies forward to the opposite bank. Now, the quick movement of the pallet and fork may make the hand mark more or less of an arc on the index than one of ten degrees, as the grasp may slip on the pallet-staff, but the arc indicated by the slow movement in unlocking will be correct.

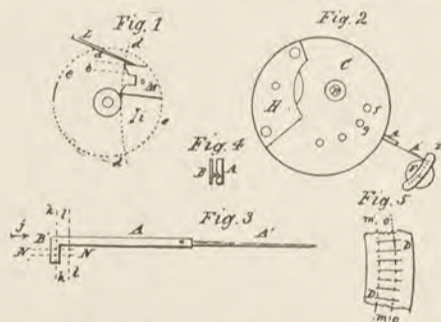
By taking a piece of sharpened pegwood, and placing the point in the slot of the fork, we can test the fork to see if the drop takes place much before the lever rests against the opposite bank. As we stated in former articles, the drop from the pallet should not take place until the lever almost rests on the banking pin. What the reader should impress on his mind is that the lever should pass through about one and a half degrees arc to unlock, and the remainder (eight and a half degrees) of the ten degrees are to be devoted to impulse. But, understand, if the impulse angle is only seven and a half degrees, and the jewel-pin acts in accordance with the rules given in former articles, do not alter the pallet until you know for certain you will gain by it.

We will, in our next succeeding article, take up the double roller and fork action, and also consider in many ways the effect of less angles of action than ten degrees. This matter now seems of more importance, from the fact that we are desirous to impress on our readers the fact that *there is no valid reason for adopting ten degrees of fork and roller action with the table roller, except that about this number of degrees of action are required to secure a reliable safety action.* With the double roller, as low as six degrees fork and pallet action can be safely employed. In fork and pallet actions below six degrees of angular motion, side-shake in pivot holes becomes a dangerous factor, as will be explained further on. It is perfectly comprehending the action of the lever escapement and then being able to remedy defects that constitute the master workman.

How to Measure the Angular Motion of an Escape-Wheel

We can also make use of our angle-testing device for measuring our escape-wheel action, by letting the clasp *B* (November, 1894, KEYSTONE) embrace the arbor of the escape-wheel, instead of the pallet-staff. We set the index arc as in our former experiments, except we place the movable index *D*, Fig. 2 of the present issue, so that when the engaged tooth rests on the locking face of a pallet, the index hand stands at the extreme end of our arc of twelve degrees. We next, with our pointed pegwood, start to move the fork away from the bank, as before, we look sharp and see the index hand move backward a little, indicating the "draw" on the locking face. As soon as the pallet reaches the impulse face, the hand *A* moves rapidly forward, and if the escapement is of the club-tooth order, and closely matched, the hand *A* will pass over ten and a half degrees of angular motion before the drop takes place.

We will warn our readers in advance, that if they make such a testing device they will be astonished at the inaccuracy which they will find in the escapements of so-called fine watches. The lock, in many instances, instead of being one and a half degrees, will oftener be found to be from two to four degrees, and the impulse derived from the escape-wheel, as illustrated at Fig. 2, will often fall below eight degrees. Such watches will have a poor motion, and tick loud enough to keep a policeman awake. Trials with actual watches, with such a device as we have just described, in



conjunction with a careful study of the acting parts, especially if aided by a large model, such as we described in our issue of October, 1893, will soon bring the student to a degree of skill unknown to the old style workman, who, if a poor escapement bothered him, would bend back the banking pins or widen the slot in the fork.

We hold that educating our repair workmen up to a high knowledge of what is required to constitute a high-grade escapement, will have a beneficial effect on manufacturers, and the demand for better work will do away with much of the trash now on the market. When we wish to apply our device to the measurement of the escapement of three-quarter plate watches, we will require another index hand, with the grasping end bent downward, as shown in Fig. 3. The idea with this form of index hand is, the bent-down jaws *B'*, Fig. 3, grasp the fork as close to the pallet-staff as possible, making an allowance for the acting center by so placing the index arc that the hand *A* will read correctly on the index *D*. Suppose, for instance, we place the jaws *B'* inside the pallet-staff, we then place the index arc so the hand reads to the arc indicated by the dotted arc *m*, Fig. 5, and if set outside of the pallet-staff, read by the arc *o*.

"Enclosed please find my subscription to The Keystone for another year, as I will not be without it. I will smoke a few less cigars in these hard times so as to be able to subscribe for The Keystone; for that journal I must not be without, let come what there will."—W. N. Jorgensen, jeweler, Burns, Oregon.



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The regular monthly meeting of the executive committee was held on Wednesday, November 7th. There were present President Hayes, Vice-Presidents Bowden and Greason, Messrs. Jeannot, Van Deventer and Secretary L. Stevens, Jr. Minutes of the previous meeting were read and approved. There were six requests for change of beneficiary received and granted and the following applicants were admitted to membership:

Section A—C. H. Chaffee, New York City, recommended by C. A. Starbuck and C. E. Leach; N. H. Davis, Worcester, Mass., by George B. Osborn and George W. Harlow; E. L. Gowen, Attleboro, Mass., by J. L. Sweet and C. L. Watson; H. N. Tuttle, Philadelphia, Pa., by H. G. Gill and F. B. Hurlburt.

Upon motion the meeting adjourned. The next meeting of the executive committee will be held on Friday, December 7th, 1894.

Penny Wise and Pound Foolish.

There are a lot of merchants (?) in this country who have a wrong notion regarding their relations to their creditors.

To judge from what such men say and do, one would infer that the seller of merchandise has no right to know anything about the financial standing of the party to whom he sends his merchandise, and must trust to luck or the good will of the debtor to pay for it. The merchandise or its equivalent belongs to the seller until he is paid, and he naturally desires to know whether the buyer can and will meet his obligations.

It very often happens, when certain merchants are requested to furnish such information as is necessary to satisfy the credit department regarding their standing, that the request is treated as an offence and receives a discourteous reply, which is apt to be something like this, "If you are not satisfied to ship my order on the information you have, you may cancel it."

Of course the "credit man" knows this already; what he doesn't know is what every merchant should be proud to tell him provided his condition is favorable. If it is not, he has no occasion to criticise the dealer if he refuses to trust him. If it is favorable, he is doing himself a great injustice if he refuses to let it be known, and is closing the doors to himself of the best sources of merchandise.

The inference always is that a man who won't make a statement of his standing to the right parties, can't make a good one, and therefore is not deserving of credit.

The basis of credit is confidence, and every dealer owes it to himself to establish the strongest confidence possible among all his creditors. The large houses know this and are exceedingly particular about it.

—Henry N. Palmer, in The Haberdasher.

ONE strong point sharply brought out in an advertisement is worth more than a dozen blunted by uncertain expression. It's the single fact rolled into a rhetorical rifle ball that hits the reader's reason and lodges in his memory. A charge of bird-shot may contain as much lead as a bullet, but it won't act the same on a distant woodchuck.

—J. Scarboro.

R. WALLACE & SONS MFG. CO.

965

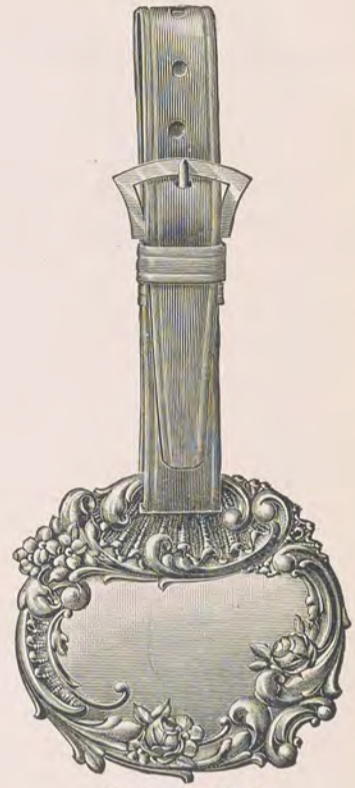
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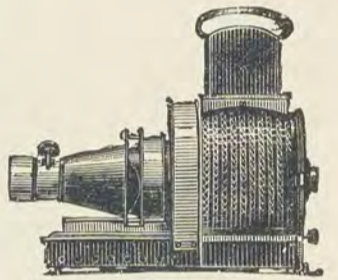
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A Hand-Book of Spectacle Adjusting for the Use of Jewelers and Opticians.

[Commenced April, 1890. Subscribers are advised to file all the back numbers, thus affording them (when completed) the most thorough treatise on the subject extant.]

CHAPTER I.—INTRODUCTORY REMARKS.
 CHAPTER II.—THE EYE ANATOMICALLY.
 CHAPTER III.—THE EYE OPTICALLY; OR, THE PHYSIOLOGY OF VISION.
 CHAPTER IV.—OPTICS.
 CHAPTER V.—LENSES.
 CHAPTER VI.—NUMBERING OF LENSES.
 CHAPTER VII.—THE USE AND VALUE OF GLASSES.
 CHAPTER VIII.—OUTFIT REQUIRED.

CHAPTER IX. (Concluded.)

METHOD OF EXAMINATION.

SYSTEMATIC EXAMINATION OF THE EYE.

Normal Vision, or a vision of $\frac{20}{20}$.	} means	{	Emmetropia
			or possibly
			Hypermetropia.
			Myopia.
			Astigmatism.
			Amblyopia.
			Spasm of accommodation.
Subnormal Vision, or a vision less than $\frac{20}{20}$.	} may mean	{	Cataract.
			Opacity of cornea.
			Organic disease of some of the humors or membranes.

Next in order comes the examination of the near vision, or the testing of the accommodation, or the measuring of the near point and far point. The nearest point at which the reading matter can be distinguished, that is, the closest point for which the eye can accommodate itself, is called the *near point*. The greatest distance at which the same type can be read may be considered for all practical purposes as the *far point*, although strictly speaking in emmetropia this is said to be at infinity. The distance between the near point and far point is called the *range of accommodation*. The force necessary to change the eye from its far point to its near point is called the *amplitude of accommodation*.

The accommodation is equal to a convex lens of such strength as would give to rays proceeding from the near point a direction as if they came from the far point, and in emmetropia the focus of this lens coincides with the distance of the near point. Therefore in order to determine the amplitude of accommodation of the emmetropic eye, the optician has only to find the nearest point at which the patient is able to read the smallest sized type. It may also be determined by a concave lens, as the strongest concave lens through which an emmetropic eye is still able to see clearly at a distance is the measure of the amplitude of its accommodation.

In hypermetropia the amplitude of accommodation which would be normally present in an emmetropic eye, will be increased by the amount of hypermetropia, and in myopia it will be diminished by the degree of the defect that is present.

Having measured the refraction and the accommodation, the optician now directs his attention to the function of convergence, which, it

will be remembered, bears a constant relation to the accommodation. The function of convergence has reference to the directing of the two eyes to a single point which is situated nearer than infinity, and the angle of convergence is sometimes called the meter angle when the eyes are directed to a point situated at a distance of one meter. This expresses the degree of convergence which is required to maintain binocular vision at this distance, and is employed as a unit from which to express other degrees of convergence. In this case the metrical angle equals one and is expressed $C. = 1$.

If the object looked at be situated at half a meter distance, the angle of convergence will be twice as large as when at one meter, and is expressed or written $C. = 2$. If at one-third a meter, the angle of convergence is correspondingly increased and then $C. = 3$. If on the other hand the object be situated at a greater distance than one meter, say at two meters or four meters, the angle of convergence will be diminished in proportion and then we have $C. = \frac{1}{2}$ or $C. = \frac{1}{4}$. The angle of convergence diminishes in this same proportion as the distance of the object is increased, until finally, when infinity is reached, the angle of convergence will have disappeared and the visual lines become parallel.

In emmetropia, for distances nearer than twenty feet, the number of meter angles of convergence required bears a constant relation to the number of dioptics of accommodation called for. At a distance of one meter 1. D. of accommodation is required to focus the image on the retina; and at the same distance one meter angle of convergence is needed for binocular vision. At a distance of half a meter, there is 2. D. of accommodation and two meter angles of convergence.

TESTING MUSCULAR SUFFICIENCY.

The function of convergence being dependent on the action of the internal recti muscles, it becomes an important matter to know how to determine the strength of these muscles and also to detect any weakness of them and of the other ocular muscles. This is best accomplished by testing the muscles with prisms. When a prism is held before one eye, the eye will have to turn in the opposite direction from which the base of the prism is placed in order to preserve binocular vision.

The power of divergence or the strength of the external recti muscles is measured by the strongest pair of prisms, bases in, which will not cause double vision of a distant object. The normal average power of the external recti muscles is represented by a prism of from 8° to 10° .

The power of convergence, or the absolute maximum of convergence, or the strength of the internal recti muscles, is determined by finding the strongest prism over one eye or the strongest pair of prisms over both eyes, bases out, which will not destroy single vision of an object held as close to the eyes as the accommodation will permit. The normal power of convergence or the average strength of the internal recti muscles is represented by a prism of from 20° to 30° .

In testing the ocular muscles in order to detect any insufficiency, the first step is to dissociate the functions of convergence and accommodation, which is accomplished by a prism placed in a vertical position. A very weak prism will suffice for this purpose (2° or 3°), and when vertical diplopia is produced in this way, any insufficiency of the internal or external recti muscles becomes apparent by a lateral displacement of one of the images.

In testing the muscles at a distance of twenty feet or more a candle flame is used; at a near distance the dot and line is to be preferred. It is customary to use a prism of 10° , which is placed over one eye with its base up or down; vertical diplopia is at once produced, and if the two images are in the same vertical plane the muscles are assumed to be of normal strength. But if there is a lateral deviation, it is due to the existence of muscular insufficiency. If the diplopia is homonymous, the insufficiency is located in the external recti muscles, a condition of esophoria. If the diplopia is crossed, the insufficiency is located in the internal recti muscles, a condition of exophoria. In the first case the degree of prism base out, and in the second case the degree of prism base in, necessary to restore the images to the same vertical line bear the measure of the insufficiency.

This test can be varied by the use of the Maddox rod or the Maddox groove, either of which, placed before the eye, elongates the flame into a long, narrow streak of light, the position of which in relation to the normal flame as seen by the other eye, will indicate the presence or absence of any muscular insufficiency. If the streak of light is directly over the flame, the muscles are normally balanced, a condition of orthophoria. If the line of light is to one side or the other of the flame, muscular insufficiency is proven, a condition of heterophoria.

The Maddox rod or groove is placed before the eye in the horizontal position when it is desired to test the internal and external recti muscles, and in the vertical position when the superior and inferior recti muscles are under examination, which means that the line of light should be at right angles to the deviation which it is desired to measure. The degree of the heterophoria and its nature will be determined by the strength of the prism and the position of its base, which are required to bring the line of light directly over the candle flame.

COMPOUND MUSCULAR INSUFFICIENCIES.

In addition to the tests for determining a weakness of any of the recti muscles, we have a test for detecting compound muscular defects (that is, of both the vertical and horizontal muscles) and also for examining the oblique muscles. This test is made by a double prism, which consists of two prisms set in a rim with their bases together.

In using this test with both eyes open three images are seen, and the position of the middle image will indicate the presence or absence of any muscular insufficiency, and what muscles are affected, if any. In this way can be detected an insufficiency of any one of the recti muscles, or of either of the oblique muscles.

In examining the acuteness of vision and determining the refraction of the eye, the card of test letters should be so hung that the best possible light may fall upon it.

In determining the refraction of an eye, the test should always commence with *convex* lenses.

Each eye should be tested separately, commencing usually with the right eye, or with that eye that possesses the greater acuteness of vision, while the other eye is excluded from vision by an opaque metal disk placed in the trial frame.

After having ascertained the refraction of each eye separately, the two eyes are then to be tried together, and it will be found that binocular vision is better than that of either eye separately; with the two eyes, stronger convex glasses will be accepted in hypermetropia, and weaker ones may be required in myopia, than the test of a single eye would indicate.

Clocks.

LXXXV.



ALTHOUGH fine diamond dust leaves a surface on either ruby or sapphire which most workmen would call a fine polish, still it is not as perfect a polish as can be obtained by means of tripoli. There is something seemingly strange about the action of tripoli or rotten stone, in the property it has of polishing precious stones. For hardened steel tripoli is nearly worthless as a polishing material, but used with water and a soft metal lap tripoli or rotten stone gives an exquisite polish to even sapphire or ruby, and seems also to be quite the best thing for polishing garnets, rock crystal, agates, etc.

Ruby or sapphire reduced to fine powder and settled off as we recommended for diamond dust, seems, to the writer's mind, to furnish the perfect polishing material for these stones. The chief trouble in employing them seems to be in using ruby or sapphire dust of exactly the same hardness as the stone being polished. The writer is led to speak somewhat at length of these substances from the fact that most workmen who will read this particular series of articles, are a class of men who take great interest in perfect workmanship, and if not absolutely perfect, approach as near to perfection as the tools and materials at their disposal will permit. There is a marked difference in the hardness of different samples of either ruby or sapphire which no sight-test will determine. It is generally held among those who make the jewels for marine chronometers that rubies of a milky look, and the red shading toward the purple, are the hardest and best adapted for horological purposes. But the writer had an experience with a pallet-jewel for a fine Swiss watch, in which a stone of exceptionally fine pigeon's-blood color was lost in some way during the process of cleaning. Nothing of as fine a color could be found ready-made, and the only resource seemed to be to make one, which he did, good fortune favoring him to a small ruby of fine color, just about large enough for the purpose. This particular stone was so hard as to almost defy diamond dust.

When ruby or sapphire dust is employed, the ruby bort is broken in the diamond mortar, described in August, 1894, KEYSTONE, care being observed to reduce the material to as fine particles as possible, then settling off in benzine, as directed for diamond powder. In most instances such ruby or sapphire dust will produce the most exquisite polish on these stones. At any rate, if ruby dust fails, tripoli and water will give a fine polish. Copper laps can be employed for polishing either with tripoli or ruby dust, but this distinction: If ruby dust is employed, oil should be used, and if tripoli is made use of, water is used with it. Many jewel-makers use ivory laps for polishing, but they are a little difficult to obtain, and also a trifle expensive, and from the writer's experience no better than some soft metal.

Block tin, which is nothing but the pure metal tin, makes good laps for rather soft stones, like garnets; but for hard stones, like rubies, sapphires, or even chrysolites, copper laps seem the most de-

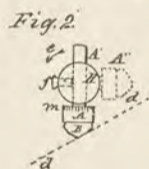
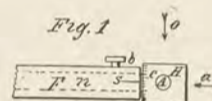
sirable. Pure zinc in the sheet, about $\frac{1}{16}$ " thick, such as photo-engravers use, makes good laps, especially for using with water and tripoli. Jewel-grinding, like most other mechanical operations, requires time and experience to acquire, but in this case the persevering workman is soon rewarded with a gratifying success. While on the subject of grinding and polishing stones, we will give the description of a little device by which a stone may be ground into facets like a diamond.

The device we refer to is only to replace the piece *H*, shown at Fig. 1, November, 1894, KEYSTONE, by the one shown at *H* of the present issue.

A Device for Grinding Precious Stones

At Fig. 1 we show only the end of the arm *F*, as the remaining portions are supposed to be the same as already described. The idea of this device is, the parts *HA* turn in two directions with their axes of motion at right angles to each other. The piece *H* is of hard brass wire, about $\frac{1}{4}$ " in diameter, and attached to the pin *n* (see November, 1894, KEYSTONE). The end of *H* facing the arm *F* is divided into graduations *c*, representing four degrees each.

The arm *F* is supposed to come flush with the piece *H*, so the zero mark *s*, Fig. 1, can be easily compared with the graduations *c* on *H*.



At right angles to the axis is drilled a hole, shown at *A*, Fig. 1, which admits the pin *A'* of the cement chuck or holder *A*. This cement chuck *A* is recessed at the lower end to receive the stone to be ground, and shown at *B*. This cement chuck is also graduated at *m*, like *H* at *c*, to enable us to set the stone at any angle we choose. It will be seen that by revolving the piece *H* in the direction of the arrow *e* we can set the stone *B* so as to stand flat across or at right angles to the axis of *A'*, or we can set it to the angle shown.

By turning *H* one-fourth of the way around it will occupy the position indicated at the dotted outline *A'*, and present the same angle to the face of the grinding lap as it does now, but on the opposite side of *B*. It is not to be supposed that such practice is proposed to grind the opposite sides, but is suggested in explanation; but such change would be desirable to bring the stone *B* in contact with a fresh surface on the lap, which is supposed to be represented by the dotted lines *d d*. The set-screws *b f* hold the parts firmly in place while a facet is being ground and polished.

"Enclosed you will please find money order for one year's subscription to *The Keystone*. I can't miss a single copy of the only good jeweler's paper published in America."
—J. D. Thorpe, jeweler, Downs, Kansas.

Inspired Business Wisdom.

The man who buyeth and selleth and advertiseth liberally in the paper, behold the people findeth him out and not to hurt; and the householder who taketh the paper and payeth therefor, the same shall prosper; he shall know when his taxes become due, and when the land is advertised by scribes and divers things; thereby he can get good bargains at the store; who has a cow for sale or a pair of mules, knoweth there is a way which bringeth up the price of wheat.

—Havre de Grace (Md.) Republican

KEYSTONE WATCH CASE CO.






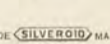
19th & Brown Sts.


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Cases and Trade-Marks

The grades of cases made by this Company, with their special trade-marks, are as follows:

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- JAS. BOSS 14 K. FILLED 
- JAS. BOSS 10 K. FILLED 
- CYCLONE ROLLED-PLATE 
- LEADER SILVER 
- SILVEROID 

In addition to the above every case made by the Keystone Watch Case Company, no matter of what grade, has the Company's general trade-mark—a keystone like this —stamped in the cap.

Guarantees

- JAS. BOSS 14 K. FILLED CASES
are guaranteed for 20 Years.
- JAS. BOSS 10 K. FILLED CASES
are guaranteed for 15 Years.
- CYCLONE ROLLED-PLATE CASES
are guaranteed for 5 Years.



This is a *fac-simile* of the guarantee given with every Jas. Boss 14 K. case.

The guarantees given with the Jas. Boss 10 K. and Cyclone cases are similar, except that the specified periods are 15 and 5 years respectively.



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The trade is hereby notified of our rights under the said Letters Patent No. 10,631, and that in future we shall hold each person or firm dealing in infringing movements personally responsible.

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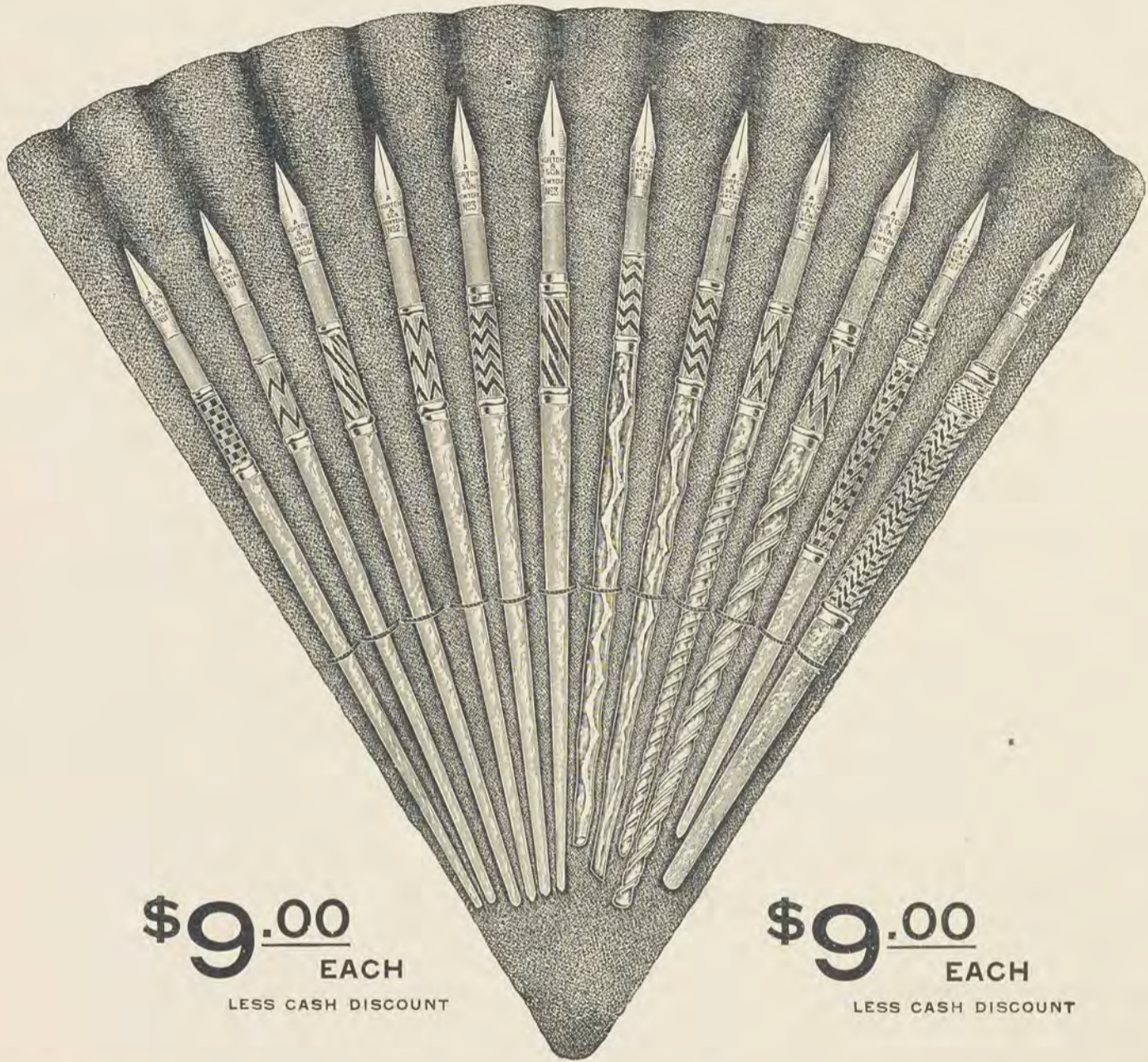
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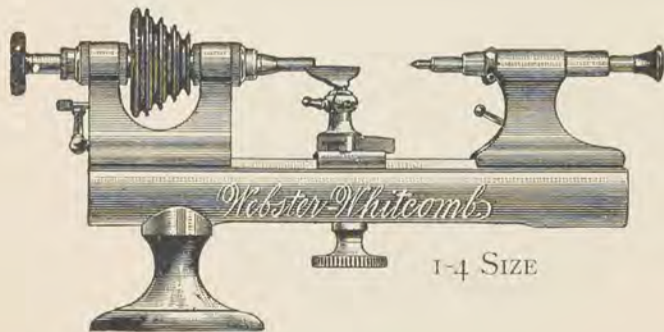


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Persons wishing inquiries answered in this department should send name and address—not for publication, but as an evidence of good faith.

"SET RING."—Please tell me what stones will safely stand the heat necessary to hard-solder a ring.

No stone will *safely* stand such heat. A diamond would in 99 cases out of 100, and on the hundredth "something would happen." We have always advised the removal of all stones in close proximity to a hard-solder job. Read our reply to "Marquise Ring."

"CURB CHAINS."—Please let me know how the curb link watch chains are made, and also how to fill the worn places in old chains of this kind.

The original process of making them was to hard-solder the links and then twist them. There is now, we believe, a machine which makes curb chains with "cold shut" links. We know of no method of filling in old chain links except to flow gold solder into the recess worn in the link. In heavy gold chains of this kind pieces of gold frequently have to be placed in the worn recess and hard (gold) soldered in place.

"ENGLISH LEVER," alias "G. H. W."—(1) Please explain the meaning of 6, 8, 16 and 18-size in watches. (2) I have an English lever watch, how can I make it run hanging up or in the pocket? It runs all right lying down on either side. (3) What is meant by the term "millimeter"?

(1) See answer to "Stops," page 797, October KEYSTONE. (2) It is difficult to tell without seeing the watch, and even then cause may elude a good workman for some time. Probably the cause in this instance is a chipped jewel. (3) A millimeter is $\frac{1}{1000}$ part of a meter, or .03937 part of an English inch. A meter equals 39.37070 English inches.

"GOLD CASTINGS."—In casting gold to make rings, etc., I use a petroleum furnace and make my castings in charcoal; and I very often find that a bar will appear perfect, but after rolling and bending I begin to polish and find it full of bubbles. I am not situated where I can get cuttlefish bone very handy, and find charcoal the best substitute. Can you give me a remedy?

In many instances charcoal is better than cuttle-bone; in fact the only place which we think cuttle-bone the best is when the object can be pressed into the bone. Probably your trouble comes from air occluded in the pores of the coal. Heating up to near the point at which charcoal takes fire will probably remove your trouble. Using charcoal, fresh burned, would also probably remove the fault.

"D 72."—(1) By what system are the sizes of American and Swiss watches determined? (2) Are there no tables published, by which to tell the various grades of American watch movements, and where can I get them? (3) Why are some kinds of watch glasses called "lenticles," and what does the name mean? (4) Do you know of any device to take off and drive on the minute pinion on the center staff of nickel clocks? (5) Where can screw plates be obtained which will cut fine watch screws, arbors, etc., close to the shoulder? (6) What is the thinnest, and yet most effective, pulling material to transfer power from counter-shaft to lathe-pulley? (7) Is one of those sudden grip bench-vises reliable, or are they apt to slip after using some time?

(1) See answer to "Stops," page 797, October, 1894, KEYSTONE. Swiss sizes are from the old

French line, or $\frac{1}{12}$ part of a French inch, which in English was 1.06577". (2) There is no such publication. Your better way is to get a catalogue of some reliable wholesale house which has cuts of the movements of the different factories, and study them up so you can tell at sight what grade they are. (3) These glasses are for bassine cases, and we presume the name is derived from *lens*, a lenticle. (4) We know of no such device. (5) Usually, screws can be cut close to the head by operating from the back of the plate. For making screw plates for bushes and mainspring arbors see our answer to "Bush" in another column. (6) Twisted leather, such as is generally adopted by most of our watch tool factories, seems to be the general favorite. We have, however, made very satisfactory belts for such purposes from soft wool yarn—the kind known as "zephyr" seems the best for such use. Such yarn can be twisted and doubled, but is better braided into round braid. Powdered rosin and oil add to its holding properties. (7) The claims for these vises have many advocates. For our own part, we never used one.

"DRY BATTERY."—Will you kindly give me instructions for making a small dry battery that will light one small incandescent lamp? How long will it run without renewal? Where can I have a lamp made according to my own ideas for experimenting?

The Dr. Gassner dry battery is about as efficient as any. It consists of a zinc vessel which constitutes one of the elements. This battery is constructed in two forms, one round and the other elliptical, according to the form of carbon employed. We show at Fig. 3 a battery of this kind of the elliptical form. The cup *F* is of sheet-zinc, about 8" high, 4" wide and 2" across the narrow way of the ellipse. The carbon *E* is about 2" wide, $\frac{3}{8}$ " thick and 9" long. At *h i* are shown the binding screws. The intervening space *n*, between the zinc cup *F* and carbon *E*, is filled with the following composition: Oxide of zinc, one part; sal ammoniac, one part; plaster, three parts; chloride of zinc, one part; water, two parts; all by weight. Such a battery has an E. M. F. of about 1.4 volts. You would require about three such cells to light a small incandescent lamp, and would make a continuous run of probably sixty hours. We know of no establishment which would make such an experimental lamp.



"MARQUISE RING."—I had a job last week and I got into trouble, and cannot get out right, and wish you to help me. I had a diamond and sapphire wire-band marquise ring brought in broken in two places, one very near the settings. Before soldering I covered the settings, as I usually do, with wet tissue paper and yellow ochre. After hard-soldering the two places and cooling off, I dropped the ring into a pickle of sulphuric acid and water, then finished it with a file, polished it on the lathe and washed in hot, strong soap-suds, rinsed, and dried in sawdust. When I looked at the diamonds they were of a blackish color, although previous to the operation of soldering they were of a white color. On examination I find the back of the prongs, close up to the stones, were black. I tried boiling in pickle, putting into dilute nitric acid, and also into benzine and alcohol, but all to no effect. What shall I do next?

Our advice to jewelers has always been to remove stones when near to the place to be hard-soldered—it is the safest plan. Intense heat will blacken a diamond, although in the present instance the probabilities are that the blackening is owing to a condensation of the smoke from the burning tissue paper on both the stones and prongs

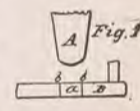
of the settings. Such coating is hard to remove, as it is almost pure carbon, on which even the strongest acids have but little effect. The black can probably be removed by electrical treatment, the same as removing fire-coat, employing a small dynamo and placing the ring as an anode. The diamonds, being non-conductors of electricity, would not be affected. Try placing in strong sulphuric acid for some little time; also strong muriatic acid if the sulphuric does not effect the desired result.

"FOIL BACK."—By what process is the mercury or quicksilver applied to imitation stones, and can it be applied successfully in the workshop?

The old process of applying quicksilver to the back of the imitation stones was to make a plaster cast of the stone, then cut tin foil to fit the cast, and after brushing over the inside of the tin-foil, press the stone into the mold, where it is allowed to remain for some time (about forty-eight hours). The foil and quicksilver will be found adhering like the back of a mirror. The later process is to deposit silver (not quicksilver) from a solution of silver by chemical action. Neither process can readily be performed to advantage in repair shops.

"WIRE BRACELETS."—(1) After putting in a new balance-staff we frequently find the hole in the roller too large for the staff. How can it be made to fit? (2) We are told that turpentine and carbolic acid, equal parts, is a fine thing for drilling staffs for pivoting. How is this combination better than oil? (3) What is the metal used in the so-called "Reliable Plater" process? (4) What are the dips used with this process? (5) What is the proper way to name or number the wheels in a watch? (6) Where can we procure solid gold or rolled-plate wire of various sizes for making wire bracelets, etc.? (7) Where can we procure the cheapest cats'-eyes and other stones with holes drilled through them; also shells for making wire bracelets? We know the jobbing houses handle them, but they charge too much. While in Denver, Colo., we saw a man selling bracelets with four and six stones for seventy-five cents, or \$1.25 the pair; and the jobbers ask twenty-five cents apiece for such stones, with no hole in them.

(1) A small, round-faced punch is usually employed for closing the hole in the roller. We show at Fig. 1 a vertical section of a roller *B* (through the axis of the staff) and round-faced punch *A*. The punch *A* should not be very much larger than the hole *a*. The shape of the end of the punch has much to do with the success of the operation. If too large the closing is uncertain, and may all be from one side, and if too small the punch will close the hole but little. Care must be taken that such closing does not throw the roller out of round, as will be the case if it closes more on one side than the other. A hole closed so as to throw the roller out of round is a fruitful source of watches over-banking. (2) A drill moistened with oil will not cut a hard staff; turpentine we have used to advantage for this purpose, but never had occasion to try the addition of carbolic acid. (3-4) See our answer to "Plater," page 979, in October, 1894, KEYSTONE. (5) From the great wheel up. We never say first or second wheel, but main wheel and center wheel, then third wheel and fourth wheel, the fourth being the one usually carrying the second hand and often misnamed the second wheel. (6) We know of no better way than to buy of the jobbers or make it yourself. A red-brass wire heavily electro-gilded and drawn through a polished hole in a draw-plate makes a good cheap substitute for rolled-plate wire. (7) Here again we shall have to refer you to the jobbers. Or can any of our readers name a cheap market for such stones?



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"GOLD WIRE."—I wish you would publish a recipe how to hard-solder gold wire, and then retemper it as before it was soldered.

There is no process which is known to the trade by which gold wire annealed by heating to hard-solder can be retempered, except by some mode of compression like hammering, rolling or burnishing.

"DIAMOND."—Would you be kind enough, through your valuable encyclopedia, *THE KEYSTONE*, to inform me if an immersion in alcohol is any test for diamonds, and, if so, in what does the test lie?

Water, alcohol and other fluids have been suggested as tests for diamonds, as fictitious diamonds lose most of their sparkle when placed in such media. No fluid is a sure test of a diamond. Good judgment, based on experience, is the only thing to rely on in judging diamonds, because admitting a given stone is a diamond it may be worth \$20 a carat or \$200 a carat, according as it ranks common or gem. A new test for diamonds has been suggested. An aluminum point will make a visible mark on glass, but leaves no trace on a diamond.

"CHAMOIS SKIN."—Can you give me a recipe for cleaning old chamois skins? I have several which are good, only dirty.

The best process is to wash with old-fashioned soft soap, made with potash lye and rancid grease. In absence of such soft soap, good old castile soap will answer, having the water about luke (blood) warm. The skins should be rinsed and wrung out of water containing some soap—pure water is not as good, as it makes the skins hard. To rapidly take up any excess of water after wringing, spread the washed skin on a dry, soft towel and roll both up together, when the towel will take out much of the moisture that wringing did not. The skins should constantly be stretched and worked during the further drying to preserve that peculiar softness of new chamois.

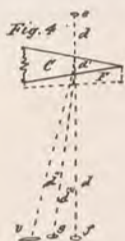
"STORAGE BATTERY."—Will you please give me some information regarding a storage battery? (1) How to construct one large enough to run a one-horse motor? (2) Can the storage battery be charged with a generator? (3) How long will it take to charge one, and how long will it run from one charging? (4) How much wire will be needed to make a one horsepower motor, the wire for the field magnets being No. 12, and No. 16 for the armature?

(1) Storage or accumulator cells are difficult affairs for amateurs to make. We shall give the process in detail in our articles "Arts Allied to the Jewelry Trade" in the near future. The rule is to allow one square foot of surface for six ampere hours. (2) We do not understand what you mean by a generator—a primary battery is a generator, and so is a dynamo a generator of electricity. We would say if you anticipate storing your electric current from any primary battery for a one horsepower motor to abandon the idea, as it is entirely impracticable. A dynamo of one horsepower would store about enough electricity in fifteen hours to run a one-horse motor ten hours. (3)

The answer first above replies to this. (4) We could not answer this to any degree of satisfaction until we know the form of motor you propose to build.

"OPTICS."—(1) Where can I procure a book on making field glasses and telescopes? (2) How does an achromatic telescope differ from one non-achromatic? (2) Why do some field glasses show objects double?

(1) We know of no work which treats exclusively on these subjects. (2) An achromatic telescope has a combination of lenses for the correction of the "color fringe," chiefly visible on white objects, which is seen in non-achromatic telescopes. The cause of this color fringe can be explained by reference to Fig. 4, where a ray of white light d is



shown as passing through a glass prism C . Such a ray is decomposed into a compound ray of seven colors. The usual manner of conducting this experiment is to make a small, round hole in a window shutter and admit a pencil of sun rays. Let us suppose the small circle at e to represent such a hole. Now if the pencil of rays were uninterrupted it would form on a white screen at f a round disk of light of nearly the same size as the hole e . If we interpose the glass prism C the spot of light f disappears, and at v is formed an elongated circle composed of the so-called seven primitive colors of the spectrum. This effect is owing to the different refrangibility of the rays composing the white sunbeam. If we now add a second prism, indicated by the dotted outline F , while the ray d is still bent or refracted to one side, the image at g will be white. Such prisms are usually made up of two kinds of glass, like crown and flint glass. With an achromatic telescope white objects show no prismatic colors, while a non-achromatic telescope fringes white objects with rainbow tints. This matter will be fully explained in a series of articles we have in preparation on "Higher Optics." (3) Lack of parallelism of the optical axes of the two telescopes will cause it, but an inequality in the magnifying powers of the two telescopes renders the appearance of two images more pronounced.

"STANDARD TIME."—Please explain the changes in our 400-year calendar and the methods of computing time, and why the condition of our country demands standard time, and why it is preferable to sun or local time. I wish the facts to meet the objections of people who do not like standard time, but insist on sun time, or God's time as some people call it.

It is a difficult matter to explain to the uneducated why sun time is not as correct as sidereal time. The period of a revolution of the earth on its axis, as compared with a fixed star, is very constant, the closest observations by the best observers finding no appreciable variation from day to day. Such revolution measured by a clock regulated to mean solar time would be 23 hours, 56 minutes and 4.1 seconds; but as the earth revolves around the sun, the star we are comparing with would seem to come on meridian sooner than a revolution of the earth as compared with the sun. It is evident we cannot adjust our timepieces by the revolutions of the earth as compared

to the fixed stars, for every-day use, but must do so by the earth's revolutions as compared with the sun, and as the sun appears to change its place in the heavens, our standard (the sun) would seem to be irregular in coming on meridian. To harmonize the apparent disagreement between clock time and solar or sun time, astronomers have devised a compromise which they call mean solar time; and if a perfect clock running to mean solar time was set with the sun on April 15th, the sun would seem to fall back from the clock, but on June 14th the sun and clock would be together again. After June 14th the clock would appear to gain on the sun until July 14th, when the clock would be six minutes fast, after which the sun would seem to gain on the clock until August 31st, when they would again agree. The greatest disagreement would be on October 23d, when the clock would be sixteen minutes slow by the sun. It is perfectly understood by astronomers why this disagreement takes place between a perfectly accurate clock and the sun, but it is difficult to explain to the unlearned. As regards the 400-year period you mention, it can be explained by saying: The earth performs its revolution around the sun in 365 days, 5 hours, 48 minutes, 49.7 seconds. No account was taken of the odd hours until 45 B. C., when the error in the computation of the year had become very considerable. The surplus 5 hours, 48 minutes, 49.7 seconds was then taken as six hours, making one day in four years; this was therefore added to every fourth year. There still remained the apparently trifling difference of 11 minutes and 11 seconds between the computed and the real year; this, however, produced an error of seven days in 900 years. In 1582 Pope Gregory XII. struck out ten days, which represented the accrued error, from the calendar, and it was decided that three leap-years should be omitted every 400 years; thus 1600 was leap-year, the years 1700, 1800 and 1900 are not, but 2000 will be a leap-year. This rectification was not adopted in England till 1752, when eleven days were omitted from the calendar. As our year still exceeds the true year, although by a very small fraction, another leap-year in addition to those should be omitted once in 4000 years. We would add that the periods stated above are the figures usually given for the duration of the tropical year, but according to Professor Harkness' late work, and accepted as an authority, the exact duration of a year is 365 days, 5 hours and 46.069 seconds.

"HAIRSPRING."—(1) What is the best to clean hairsprings in? I have always used sulphuric ether, but recently I have had a number of good hairsprings ruined by rust from using it. Can you explain the cause? (2) What is used by the factories on solid silver cases to prevent their turning yellow?

(1) In the preparation of ethylic or, as it is often termed, sulphuric ether, if the process of distillation is carried too far some sulphuric acid is carried over, which accounts for the rust. Our experience prompts the belief that a good quality of benzine is about the safest fluid to employ for cleaning hairsprings. A good practice is to have three small bottles of benzine; then place the hairspring in bottle No. 1, shake the bottle well. Take it out with a wire hook and place in bottle No. 2, shake again. Take it out and place on clean blotting paper to dry. Throw away the benzine in bottle No. 1 and fill with fresh benzine, letting this fresh bottle be No. 3, to be used last. (2) We never heard of any precaution except cotton flannel bags. Silver-plated ware is sometimes coated with a film of collodion to prevent tarnishing.

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COL. J. M. RUTHERFORD

Jewelry Auctioneer

Established since 1858.

ROOM 7,

618 Chestnut St., Philadelphia, Pa.

From Ed. H. Thielens, Jeweler, Mattoon, Ill.



SALES FOR JEWELERS ONLY, IN ANY PART OF THE UNITED STATES OR PROVINCES.

If you do not hear from me at once after writing, you may take it for granted that I am conducting a sale somewhere, and your letter will be forwarded to me at once for reply.

Some eight months since I decided to dispose of my business interests in this little city of 8,000 population, and remove to a larger field. My stock consisted of Watches, Jewelry and Silverware, and as the house was well established I did not doubt but that a purchaser could be easily found. I advertised extensively in the trade journals, and not only received many replies, but several buyers made trips to personally investigate. None, however, were prepared to pay the rather unusual *all spot cash* terms I demanded. Finally, as a last resort, and very much against my judgment, I decided that the only means to make an absolutely clean sweep for cash in hand was to have an auction. I corresponded with the ten best jewelry auctioneers known to the trade, and simply on the strength of the "business-to-the-bone" tone of Col. J. M. Rutherford's letter did I decide that he was the man I needed. Briefly, the Colonel commenced on Saturday the sale by auction of a hard stock (including much fine and expensive goods I had carried in stock for years).

After looking over the stock, Col. Rutherford thought the sale could be made in ten days or two weeks, but did not give me much encouragement as to the financial result. He closed out the stock, including all fixtures, making an absolutely cyclonic sweep of every piece, and finished the sale on Saturday night—one short week. This phenomenal sale was made without one single misrepresentation of the quality of a piece of goods. All purchasers, without an exception, are satisfied, and to-day I have in bank the original cost of my stock and fixtures, and besides, a gross profit of 25 per cent.

The sale was a revelation, and its extraordinary success I attribute to the religious execution of the order that I received from "The Pioneer Jewelry Auctioneer of the United States," who is a prince among his fellows—urbanity personified—and a refined gentleman.

Brother Jewelers:—If you need ready cash, want to quit or move, employ the Colonel, obey his orders to the letter, and my word for it, he will do the rest, and there will be no freight to pay.

Very respectfully,
 ED. H. THIELENS.

REFERENCES BY PERMISSION:

OPPENHEIMER BROS. & VEITH, NEW YORK.
 CHARLES L. KRUGLER, NEW YORK.
 GEORGE L. STREETER, NEW HAVEN, CONN.
 WILLIAM H. WATROUS, HARTFORD, CONN.
 HENRY J. YOUNG, JOLIET, ILL.
 WILL. SUCHMILCH, DULUTH, MINN., 2 SALES.

THOMAS E. DOUGHTY, EAST SAGINAW, MICH.
 BURT & HURLBUT, DETROIT, MICH.
 BOWMAN & MUSSER, LANCASTER, PA.
 REED, McGRANN & CO., BANKERS, LANCASTER, PA.
 H. Z. RHOADES & SON, LANCASTER, PA., 2 SALES.
 LOUIS S. LOWENTHAL, BRADFORD, PA., 3 SALES.

H. MUHR'S SONS, PHILADELPHIA, PA.
 LOUIS ATKINSON, PHILADELPHIA, PA.
 BURT DENNISON, ASHEVILLE, N. C.
 JOSEPH PYNE, HARRISBURG, PA.
 W. W. RUDISILL, ALTOONA, PA.
 ALBERT FRANZHEIM, WHEELING, W. VA.

C. F. VON KANEL, MASSILLON, OHIO, 2 SALES.
 MARTIN BOCK, HAZLETON, PA.
 JOHN A. WORRELL, WASHINGTON C. H., OHIO.
 S. R. PARLIN, NORWICH, CONN.
 STEVENS BROS., ATLANTA, GA.
 J. E. JARCK, DANVILLE, VA., 2 SALES.



Persons wishing inquiries answered in this department should send name and address—not for publication, but as an evidence of good faith.

"ALUMINUM."—(1) Are aluminum watch cases manufactured in the United States; if so, where? (2) Which are the best imitation of genuine diamonds, and where are they manufactured? How long have they been in use and what are they called?

(1) We do not know of any watch cases being made in this metal. (2) See the advertising pages in the November KEYSTONE, where you will find a number of them advertised.

"HANES."—(1) What is meant by "rose" diamonds? (2) Where and at what cost can I get Burnham's work on precious stones? (3) I am anxious to study mineralogy; what course would you advise me to pursue?

(1) The term "rose" applies to the method of cutting, and signifies a diamond cut flat on one side and faceted on the other. (2) At this office; price, \$3.50. (3) Procure some good works on geology and mineralogy, say Nicholson's "Text-book of Geology," price, \$1.30; Bauerman's "Mineralogy," price, \$2.00; James D. Dana's "Determinative Mineralogy," price, \$3.50. A preliminary study of geology is essential to properly understand mineralogy. If you study geology it will be but a little time before you will be able to classify rocks and know where to look for certain minerals. Then by the aid of the study of mineralogy you will know how to classify and determine the name of any mineral you may come across.

"BUCK-SAW."—(1) How are broken balance-pivots generally replaced? I have a Whitecomb lathe, use the best of drills, but have never been able to drill a staff. (2) How do horological institutes get enough work to keep them busy? (3) I have a thermometer with about 1/4" of mercury stuck at the top of the glass tube; how can I get it down? (4) After moving the regulator of a watch as far as it will go, what is the best way to make the watch go faster?

(1) It would require several pages of THE KEYSTONE to answer this question properly, but we can furnish the information in a little book by the "Lightning Pivoter," price fifty cents, or given as a premium for a new subscriber to THE KEYSTONE. (2) They advertise for it and a good deal comes through the influence of the pupils. (3) Usually, if the column of mercury below it is brought in contact with it molecular attraction will cause the separated mercury to reunite and go back with that in the lower end. A quick up-and-down shake will usually bring the mercury together. (4) The usual plan is to "take up" the hairspring a little, moving the hairspring collet so as to keep the watch in beat.

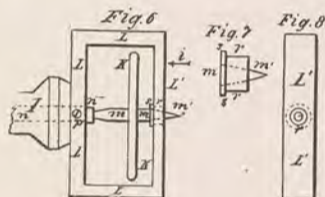
"VOLTAGE."—Is there any way to ascertain the difference between volts and amperes in an electric current? For instance, how can you tell the difference between fifty amperes of current with an E. M. F. of twenty-five volts, and a current of twenty-five amperes with an E. M. F. of fifty volts, the resistance being common?

For testing for voltage it is usual to place in the circuit a known resistance equal to about fifty ohms for every volt to be measured. For illustration, suppose you have a current, as you first instanced, of twenty-five volts and fifty amperes; you ignore the amperes and place in the cir-

cuit a resistance of 1250 ohms and measure the amperes which pass through this resistance, which in this case we find .02 amperes. This multiplied by 1250 (the resistance placed in the circuit) gives you twenty-five, which tells the actual voltage. There is nothing which so puzzles the novice in electrical matters as the distinction between voltage and amperage. We are, in our articles "Arts Allied to the Jewelry Trade," giving instructions for measuring electric currents, and we think if you read these articles carefully and make the instruments described you will be able to perfectly discriminate.

"NICKEL CLOCK."—I should like to know the easiest way to repair the pivots of a balance for a nickel alarm clock when the points are worn off.

There is no mistake in understanding what is required to bring the balance all right again, it is simply to restore the points of the pivots. But the trouble is, how are we going to do it? Such pivots are file-hard, and about the only resort is to grind them. A simple tool for this purpose is



shown at Fig. 6. It consists of a stirrup-shaped piece fitted to an extra lathe chuck, say a cone or a brass cement chuck. This stirrup-shaped piece should be made quite strong and stiff, and the better material for it is steel. It may occur to our readers to employ their screw chuck for cement brasses, but such an arrangement seldom does well, because if we attach such a stirrup to a cement brass it seldom runs dead true after once removed. If a screw chuck is used, let it be fitted up for the purpose and the stirrup *L* permanently attached. About the best chuck is one for a cone center, usually called a taper chuck, to the end of which is attached the stirrup *L*. Through the center of the arbor *I* goes a back center, working much like the stepping device to a Moseley lathe, or it can be worked like the center of a Universal face-plate. In this case there is a set screw placed at *p* which clamps the movable center *n*. The idea of the device is, the balance and arbor shown at *K m* are placed inside the stirrup *L* so the pivot *m'* protrudes. The hole in the bar *L'* is made slightly taper so that nearly the whole length of the pivot protrudes. The back pivot rests in a hollow cone in the back center *n*. For re-pointing the pivot *m'* nothing equals a parallel grinder such as we have described in former numbers of THE KEYSTONE. An emery stick can be employed, but of course the pivot will not be perfectly round. Thimbles of different sizes, and shaped as shown at Fig. 7, should be provided, in order that any size of staff can be accommodated. This thimble can be of brass. Fig. 8 is an end-view of Fig. 6, seen in the direction of the arrow *i*. If an emery stick is used, a small washer of stencil brass should be placed as indicated by the dotted circle *r*, Fig. 8, to prevent the emery stick from cutting the front of the stirrup. Aside from this plan we think about the quickest plan is to draw the temper of the pivots and, putting the staff in wire chuck, point up the pivots and rearden. By putting on the pivots, before heating, a composition made by mixing castile soap with water to a thin paste, they will be almost perfectly protected from

scaling. It is hardly necessary to polish pivots treated in this way, as the balance will run as nice as a new one.

"GOLD RING."—(1) I see some jewelers use a preparation to protect gold rings while hard-soldering, which they coat the ring with, which looks like finely powdered chalk or borax, and after being soldered put in a liquid which looks like alcohol to remove the coating, and from that into another liquid which looks like the first, and then proceed to polish. I see that it answers as well as sulphuric acid pickle. Can you tell me what they use? (2) How can I enlarge the pivot holes of balance and plate jewels when they are too small?

(1) It would be a hard matter to keep track of all the preparations gotten up for protecting work during the process of hard-soldering. From your description we think probably the white powder was either pulverized boric acid or talc, or a mixture of both; the fluid used would be hard to guess, probably a mixture of some acid with water. In the experience of our expert no preparation for holding color on gold during the operation of hard-soldering ever excelled the following: Yellow ochre, four parts; boracic acid, one part. These ingredients are mixed with boiling water to thoroughly incorporate them and allowed to boil for an hour. The composition is applied as a paint to all the surface heated, except where the solder is to flow, as it prevents this action.

"POOR MOTION."—I have a watch which when lying down the balance will take a good motion, but hung up, or any vertical position, it does not move properly. The roller jewel seems to be of the right size. Can you explain the matter?

Many causes would produce such results. (a) Pivots too large. (b) Jewel or jewels to balance rough or splintered. (c) Extra friction in vertical position. The first of these causes would reveal itself on a very cursory examination. The second cause would also be easily determined. The third or last count can usually be got at by holding the movement in a vertical position and revolving it slowly, when in some positions the motion will noticeably fall off. For instance a watch banked too close, so the roller rubs on the guard-pin when held so the side-shake of the balance pivots allows the balance to pass to the closest possible position to the guard-pin. If banked too wide the opposite result would follow; that is, the motion would fall off when the side-shake carried the balance roller as far away from the fork as possible. Careful study of the movement when held in different vertical positions, together with hard thinking as to what might cause such falling off in motion, will soon set you right. Study our articles on "The Detached Lever Escapement."

"BLACK HILLS."—(1) What is the best method and machinery for cutting and polishing agates and stones of that nature? (2) What is the best work on precious stones and where can it be obtained? (3) What is the best work on fossils?

(1) To properly answer this question would fill at least the entire pages of two numbers of THE KEYSTONE. You can get a small outfit for grinding and polishing precious stones of F. W. Gesswein, 39 John Street, New York. (2) Probably the best work for you is "Gems and Precious Stones of North America," by George F. Kunz, Scientific Publishing Company, 27 Park Place, New York. (3) We know of no work specially devoted to petrology. A very useful little work is No. 86 of the Van Nostrand Science Series. The title is "Hand-Book of Mineralogy," by J. C. Foyce. Price, fifty cents. To be had of Van Nostrand Publishing Company, 23 Murray Street, New York City.

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Simple in Construction
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One of the **BEST**
of the **VERY BEST.**

QUALITY

IS THE STANDARD OF VALUE FOR
WHICH WE COMPETE.

Learn all you can about the Moseley Lathe.
A bread-winner for the watchmaker.

We furnish you good lathes and chucks,
while the other fellow furnishes the wind.

When interested, write your jobber for 1894 Price-List, or the manufacturers,
MOSELEY & COMPANY, Elgin, Ill.

Notice the No. 2 Chuck has length, strength and accuracy.



THE
GENUINE
MOSELEY
AND
WARRANTED

DIAMOND JEWELRY at Popular Prices

Opals Emeralds
Rubies Sapphires Pearls

and all other Precious Stones set in tasteful and novel combinations.

Large and complete assortment always on hand in

Rings Scarf Pins
Brooches Studs, etc.

T. B. BYNNER, 177 Broadway, New York

Selection packages sent to responsible parties.

Special Holiday Announcement



To meet a demand for a Diamond Ring to retail for \$5.00, we now offer a Diamond Ring in Ladies' and Misses' sizes that we sell for **\$3.75**. This is a great seller for the Holiday trade.

We are now prepared to fill promptly orders for our popular Diamond Rings—Lady's size, **\$12.00** dozen; Child's size, **\$6.00**—and our Solid Gold Victoria Chains at **\$2.75** each, already advertised.

RUBENSTEIN BROS.

Headquarters for **QUICK-SELLING GOODS** at Popular Prices,

Importers of Diamonds and
Special Agents for American Watches.

14 Maiden Lane, New York.

THE BEST CHATELAINNE IS THE

Lady Racine

MADE IN STEEL AND IN SILVER CASES.



10 LINE



13 LINE

10 LINE OPEN-FACE.

11½ LINE OPEN-FACE AND HUNTING.

13 LINE OPEN-FACE AND HUNTING.

The Silver Cases are 0.935 Fine.

The Movements have 10 Jewels.

The Engravings are Choice.

12 LINE OPEN-FACE.

MADE IN SILVER CASES ONLY.

Cases 0.800 Fine.

With a 6-Jewel Movement.

Expressly gotten up to suit the times.

A good Chatelaine watch at a low price.



12 LINE

Do not fail to ask your Jobber for
The New 12 Line *Lady Racine* in 0.800 cases.

New York and Pennsylvania Notes.

The interior of Frederick Fuller, Jr.'s, jewelry store, Jamestown, N. Y., is being remodeled. When improvements are completed it will be one of the handsomest business places in the State.

B. F. Johnson, formerly with E. J. Kneeland, Lansing, Mich., has opened a jewelry store in Truansburg, N. Y.

William Lesser, of A. Lesser's Sons, Syracuse, was recently initiated into the mysteries of the Masonic Order. His brother Harry is a popular member of the Order of Elks.

Chas. E. Eager and twenty-four other jewelers of Syracuse asked the council to investigate the proceedings of the auction now going on at 334 South Salina Street. The auction, the petitioners believe, is being conducted in violation of the law in that the stock is really owned by out-of-town people. The matter was referred to the corporation counsel and the committee on rules and ordinances.

A. B. House, of Orwell, N. Y., has been robbed three times within a year. The last time was about a month ago. His store was broken into and a few chains and knives were taken, amounting to about twenty-five dollars. Mr. House had taken what watches and jewelry there were home that night, and thinks it a good plan for the future.

A. N. Jewett, Cortland, N. Y., was in New York City, buying goods for the holidays.

Willard & Son intend to give up their store in Binghamton and move to Utica. They can be found there with W. B. Wilcox, the artistic jeweler.

William Pickard, who has been employed over twenty years as watchmaker for the old house of Whitney & Co., Binghamton, has gone into business for himself in that city on Court Street. Mr. Pickard has many friends in the Parlor City, and there is no doubt of his success.

The laying of the corner stone of the Commercial Travelers' Home Association of America, in Binghamton recently, was quite a boon for the jewelers of that city. One firm alone sold over one thousand C. T. H. A. of A. buttons.

The large front window of J. S. Newing's jewelry store, Binghamton, was broken and a quantity of jewelry taken. As yet there is nothing certain as to who the robber is.

Three or four new watch repairers have started business in Binghamton. That city seems to be a good field for repairers.

In a talk with W. L. Frear, one of the leading jewelers of Binghamton, that gentleman expressed the opinion that there would be a very favorable holiday trade. This opinion seems to be shared by the other jewelers of that city.

Factoryville, Pa., near Binghamton, N. Y., boasts of a lady watchmaker, who has a splendid repair trade. The young lady's name is Nellie Green.

The death of Fred. B. Small, a popular young jeweler, of Factoryville, Pa., occurred recently. Death was caused by pneumonia. Mr. Small leaves a wife and two children. He was twenty-six years old, and had a host of friends in Factoryville and vicinity. The stock at present is in the hands of Mr. Hines, the administrator. Mr. Hines is the father-in-law of the deceased, and offers the stock and good-will for sale.

C. W. Freeman, a leading jeweler, of Scranton, Pa., advertises his store for sale.

Edwin G. Lloyd, Scranton, Pa., has bought out the store formerly occupied by Hitchler, the jeweler, of Olyphant, Pa., and will run the Olyphant store as a branch. Mr. Lloyd will spend part of the time in his store in Scranton.

Up to date no trace has been discovered of the thieves who broke the glass show-case in Mr. Luther's store, Scranton, and stole a number of gold watches. Mr. Luther says they were undoubtedly experts at the business.

The jewelers of Scranton and vicinity should make a determined effort to rid the city of sidewalk jewelry stores. They are an unmitigated evil.

E. G. Lloyd, jeweler, and George E. Pryor, optician, of Scranton, were in New York City recently.

The Rexford Jewelry Co., of Scranton, has a very neat branch establishment in Washington, D. C. The firm consists of W. F. Rexford and Jas. T. Mangan.

In a recent talk with some of the jewelers of Scranton, it was said trade has been rather quiet during October and November, yet the prospects for the holidays are very favorable. Scranton and vicinity usually enjoy a very heavy business when things do move, and there is every reason to believe that the people will hold back until within a few days of Christmas, and then there will be a grand rush.

J. K. Thompson, for a number of years in the employ of Mercereau & Connell, Scranton, has accepted a position as salesman with T. C. Tanke, Buffalo, N. Y.

Improvements seem to be the order of the day among the jewelry stores of Carbondale, Pa. The four jewelers of that city, Burr, Cameron, Ely and Borst, are all putting their stores in fine condition for the coming holidays, and expect a good business.

For pure unadulterated fun and business combined, your reporter thinks the palm should be awarded to Bernard W. Cooney, of Dunmore, Pa. Mr. Cooney combines the position of justice of the peace with watchmaker and jeweler, and the way he administers justice to both men and watches shows true knowledge on both subjects.

Edward E. Fitzpatrick, of Utica, N. Y., has extended his store on account of increasing business.

Jeweler Bernard Goldstein, of Utica, has been severely censured by the coroner's jury in the case of the death of Stewart England, who was killed by an electric shock from the safe of Goldstein, on October 25th. Goldstein is condemned for maintaining a death trap in so public a place as his store, ready charged for the first person who happened to come in contact with it. —Syracuse Evening Herald.

H. P. Gray, of Cortland, N. Y., has sold his jewelry store at 79 Main Street, to G. L. Henson and J. A. Crisp, of Jefferson, Ohio, who will continue the business under the firm name of Henson & Crisp. The former has had fifteen years and the latter twenty-one years' experience in the jewelry business. Mr. Henson, who is a brother-in-law of H. F. Bingham, of the firm of Bingham & Miller, has moved to Cortland and will be in charge of the store, while Mr. Crisp will continue in charge of another store owned by the same firm in Jefferson. Both the gentlemen have the reputation of being hustlers and honorable business men in their old home, and they will run a first-class store in Cortland. H. P. Gray, who retires, will remain with them for a time as an assistant.

B. F. Lesser, of A. Lesser's Sons, Syracuse, N. Y., will make his headquarters in Utica the coming holidays; Wm. Lesser in Elmira, Sim Lesser in Scranton, and John Tausand of this firm in Rochester. The friends of the Lesser family will be pleased to learn that Mrs. A. Lesser, mother of the brothers, is improving in health.

At a recent fire at Caledonia, N. Y., the store of Frank Chase was damaged by fire and water.

Jeweler Offenhauser, Granville, N. Y., has removed to his new quarters in the Norton block.

Andrew H. Schilling, an Oswego jeweler, was killed while attempting to board a moving train in Syracuse on November 3d. He was a member of the original Pierce quartet and the Saengerbund vocal organization. He was also a prominent member of Branch No. 76, C. M. B. A., and was esteemed lecturing knight of Oswego Lodge, No. 271, B. P. O. Elks. Until recently he was captain of the Oswego Bicycle Club.

"Enclosed find the dollar for *The Keystone*; 'tis long coming. I must tell you that I am in possession of No. 1, with all the intermediate numbers, which I take good care of and am proud to own, and shall to the end of the chapter."—Geo. Mitchell, jeweler, Marshall, Missouri.

Scarborisms.

The hasty advertiser, like the hasty fisherman, is apt to cast his lines in barren waters.

Putting out effective advertising without being able to back up your claims behind the counter is something like attaching a tempting bait to a bent pin on a rotten line.

The man who stops advertising because business is dull is a good deal like a stranded lobster that ceases action because the tide has gone out. The shores of the financial seas are strewn with human lobsters waiting for the billows of good times to set them afloat.

The man who pulled up his young peach trees because they wouldn't bear fruit at a year old is close kin to the fellow who drops his "ad." after the first insertion because it doesn't make him rich.

If you wanted a barrel of rain water, would you set your barrel in an open lot or would you put it under the spout of a leader?

In building a business would you locate in a street and take the customers as they happened along your way, or would you, through the aid of advertising, turn streams of buyers from other streets into your store?

Only Sure Road to Wealth.

"Early to bed and early to rise"
May make men healthy and may make men wise,
But as to "wealthy"—its enterprise;
They've got to "hustle" and advertise.

—Ex.

Special.

Cor. Fourth and Market Streets,
WINONA, MINN., Oct. 13, 1894.

This has been engraving week. The entire week has been devoted to engraving *exclusively*, and many pupils cut their first stroke on last Monday morning, and this Saturday night there is not a single pupil in my school that cannot cut fair script letters and words; and some can cut script perfect, much better than many men who claim to be engravers. I have preserved much of the work. All were also taught Old English and there was much good work done in that line. Script Monograms were also taught and many beautiful ones were turned out by the pupils this week. They were also instructed how to cut block monograms; also how to cut for enamel; also how to cut figures and how to do ornamental work; of course, in this only the basis and groundwork could be shown. They learned the proper way to hold the graver and how to sharpen the graver and how to polish the graver; how to secure plates and other work with wax; also how to engrave rings by several practical examples; and also how to do transferring by different methods; also how to engrave silver and nickel spoons by practical examples; also how to use the line graver; also how to use the engraving block. Well, the engraver said to-night that he could not engrave as well after one and a half year's practice as several of the boys have learned to do in one week's time, and that he regarded the progress made as astonishing and wonderful.

Now, what we have done for others I see no reason why we can not do the same for you or any one else. Come and see me and I will assure you I will do my part to assist you to be a Practical Engraver, Watchmaker, Jeweler and Optician, and I will do all I can to help you to get there as soon as possible and A No. 1. I shall have from time to time a first-class oculist and optician to assist me in how to examine the eye and test the sight, and to fit the eye properly with glasses of various kinds, and to explain in *plain, clear and concise easy English* all the aforesaid and how to use the *trial case* and how to use the *ophthalmoscope* and also muscle tests, etc., and to give general information in regard to the eye and glasses, practical information that you can use and convert into dollars and cents. Nobody will be kept back. Everybody will be advanced as rapidly as possible in every branch. I have also made arrangement with a manufacturing and jobbing jeweler and first-class diamond setter to come and assist me from time to time in giving instructions in the setting of diamonds and other precious stones in various ways and how to do general jewelry repairs.

The methods I teach are first-class and up to date, and I have several other new features that I shall add as soon as possible that I am perfecting arrangements for, and, in the meantime, please bear in mind that my school building is a large one and *flooded with light by the great orb of day*. We have large windows on three sides of the building. We have a bench for each pupil, and each pupil is provided with a lock and key for his bench; also remember, please, we are on a corner and no other buildings near, and that we have plenty of light and air, and that our building has *double windows all around and triple doors, and kept nice, warm and clean, and well aired and ventilated*. I shall aim to leave nothing undone for the instruction and comfort of my pupils at all times.

Now what more, all pupils can have all the money they can make out of watch, clock and jewelry repairing while they are here, and they can also have all they can make out of selling spectacles and eye-glasses; and more, they can have the advice, assistance and skill of the oculist and optician to help them out in any complicated cases, and more, they will be taught how to cut and grind lenses and how to repair frames of spectacles and eye-glasses; and more, pupils can have all the profit they can make out of any watches, clocks or jewelry they can sell, and the goods shall be furnished to them at *wholesale prices* while they are pupils in my school.

All the foregoing are means to help the poor man or poor boy out should he run out of money, and still he will be strictly in his own legitimate business. Think over all the advantages that I am offering you: they are worthy of consideration, and I hope you will act on them and become a pupil in W. F. A. Woodcock's School in Winona, Minn., at once.

If there is any other advantage that you want, let me know, please, and I think I can give it to you, at least I will give it my careful consideration and will do all I can for you. I loan lathes *free of charge* to pupils who cannot or do not wish to buy, and any one wishing to buy a lathe of any make can get it of me at the *bottom price, either American or imported*. The tariff has passed; I have been busy for several years instructing men and youths of all kinds from various parts of the world. I am busy, I want to keep busy, and I want lots more to follow, and as progress is the order of the day, I want it known to all men, all over the world, that I am a progressive man. Come and try me and see, and you will find every word I have told you is true. Remember, please, I am W. F. A. WOODCOCK, Winona, Minn., and that I can secure you *good board and room for twelve dollars per month, good food, well prepared and all you can eat*.

Talk about advantages, I do not believe that there is a school on earth that possesses as many advantages as W. F. A. Woodcock's School in Winona, Minn., to learn in a first-class manner, thoroughly practical in every respect, Watch and Clock Work, Jewelry Jobbing or Repairing, Engraving and Optics. I am in dead earnest and you can believe every word I am saying. I am conscientious when I make these statements. I do so with all due respect to everybody, and if anybody thinks that they have got an advantage that we have not got, speak out, please, and I will strain every nerve to go you one better. I am,

Yours truly,

W. F. A. WOODCOCK,

Cor. Fourth and Market Sts. Winona, Minn.

P. S.—If you will please let me know when you are coming and over what road, write or wire me in time and I will see that you are met and courteously treated. Remember, please, that the school is on the corner of Fourth and Market Streets, and that my residence is 114 East Wabasba Street, Winona, Minn.

W. F. A. WOODCOCK.

YOUR IDEALS AT LAST

The Marguerite



A. 6139

6 SIZE. HTG., \$15.00, ACCORDING TO KEY

Repoussé Ornamentation

Repoussé

means ornamented metal work in relief. It is *new* as an ornamentation for watch cases, but it is not new in art. Some of the finest specimens of it are of the historic *Cinque-cento* or Sixteenth Century period, and are the work of that patron saint of metal-workers, the immortal Benvenuto Cellini. On no article of gold or silver ever produced does this species of ornamentation look handsomer or richer than on the original of the above illustration, the prettiest filled watch case ever put on the market. Any jobber can supply you.

The Orlando, with Wide Chased Border



A 6260

Htg., \$22.00 O. F., \$20.00



A 6263

Htg., \$22.00 O. F., \$20.00



A 6271

Htg., \$22.00 O. F., \$20.00

MADE IN 18 SIZE ONLY

PRICES ACCORDING TO KEY

Chasing

is ornamentation partly engraved and in relief. It is from the French *enchasser*, signifying "to set a jewel," and has come to mean embossed jewelers' work. It has always been considered the highest grade ornamentation, as shown by the predilection for it of master artists, such as Phidias, Cellini and hosts of others. The shield of Achilles was thus ornamented, and other masterpieces by the ancients. It is quite new as an ornamentation for watch cases, and in connection with the beautiful hand-engraved centerpiece, as shown in the above illustration, forms the most pleasing of contrasts. Samples of this handsome case may be had from any jobber.

These cases have Non-pull-out Bows.

Keystone Watch Case Company

THE LATEST SUITOR

FOR FEMININE FAVOR



A 5773
HTG., \$14.00

The Rosalind

This case has a new-shaped back, chased centers and borders and, as the illustrations show, exceptionally fine hand-engraving. The Rosalind is made in 6 and O sizes and can be had from any jobber.



A 6270
HTG., \$15.00



A 6152
HTG., \$15.00



A 5270
HTG., \$14.00

PRICES ACCORDING TO KEY.

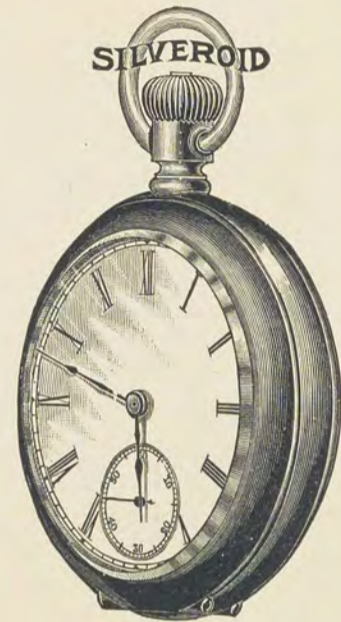
These cases have Non-pull-out Bows.

Keystone Watch Case Company

The New Silveroid Case

is specially designed to meet the demand for a watch case in this low grade with one or all of the following points of excellence and superiority, hitherto characteristic of higher grade cases:

- 1st—It is half bascine.
- 2^d—While perfectly tight-fitting, it can be opened with the greatest ease.
- 3^d—It has a well-rounded rim instead of the old finger-cutting knife edge.
- 4th—Unlike the old clumsily-sized Silveroid cases, the **New** case is much smaller, just the pretty and fashionable watch-case size of to-day.



70
18 SIZE, O. F., \$1.50, ACCORDING TO KEY

These qualifications are peculiar to the **New** Silveroid, and found on no other nickel case. When ordering from your Jobber,

Ask for the **New** Silveroid.

ANOTHER NEW STYLE OF CASE IN THE WHITE METAL



69

HTG., \$3.00 O. F., \$1.80
MADE IN 18, 16 AND 6 SIZES PRICES ACCORDING TO KEY

This Silveroid Case

with Vermicelli Border

is cheapness most effectively disguised. The contrast in this lustrous metal between the Vermicelli ornamentation and the engraved center is remarkably pretty, and gives the cases a tone of exclusiveness out of all proportion to the price.

Have you tried this pattern on your customers?

Keystone Watch Case Company

A THRILLING WAR INCIDENT

THAT INTERESTS EVERY JEWELER



SINKING OF THE KOW SHING.

In July last the transport ship Kow Shing, Captain Galsworthy, Master, flying the British ensign, was chartered by Li Hung Chang, the Chinese premier, to take 1100 Chinese soldiers to Korea. When out one day the Kow Shing was overhauled (July 26th) by the Japanese warship Naniwa and ordered to follow her. The Chinese stubbornly refused to allow the Captain to obey. In a moment the red flag (meaning fire) was hoisted on the Naniwa, five guns were trained on the doomed Kow Shing, and a torpedo was already bearing death to over 1100 souls. In this desperate predicament Captain Galsworthy seized a life belt, jumped overboard and watched from wave crests the sinking of his ship. After an hour and a half's struggle with the waves he was picked up exhausted by the Japanese, and on resuscitation discovered that his watch was still running.

IT WAS

a Waltham movement encased in

AN ENGINE-TURNED JAS. BOSS CASE, No. 2,249,180.

The Captain, on his way to England to report to the British Admiralty, called in person at our New York office to congratulate us and show us the timepiece which he values so highly. Truly Jas. Boss cases are their own best advertisement.

Keystone Watch Case Company

The "Knock-out" Circular

Fake Gold Watch Advertisers Discomfited and the Trade Restored to Jewelers

Front of Circular.

**Beware
Of
Misleading
Advertisements
About
Watches**

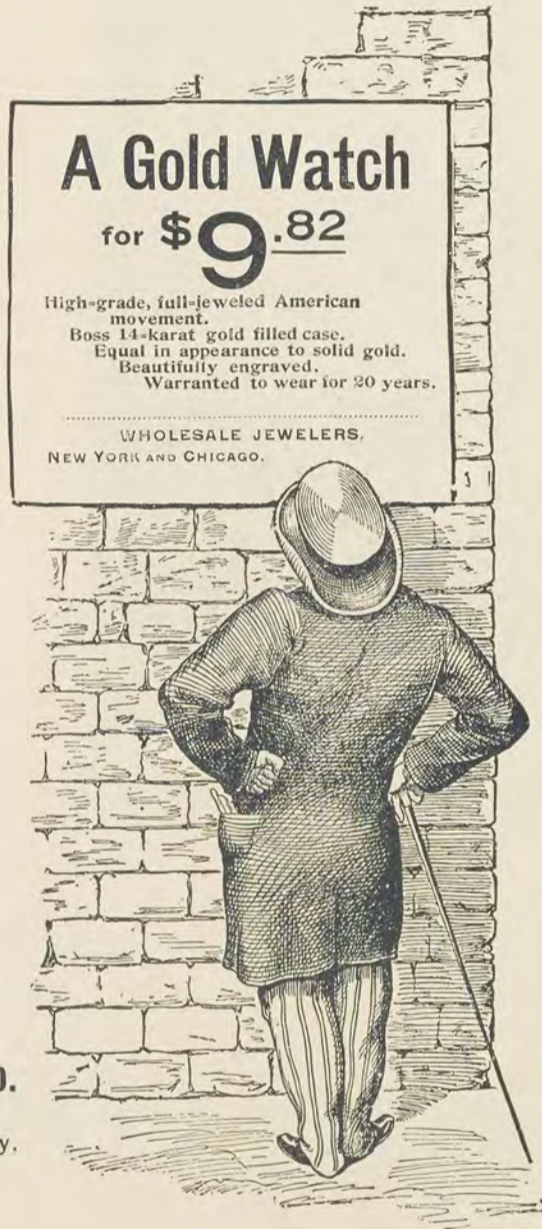
You can no more buy a watch such as described for \$9.82 than you can buy a gold dollar for seventy cents.

The advs. are misleading and the advertisers are schemers.

They try to make you believe that they will give you better value for your money than your home jewelers will, but in reality they give you less.

Read the other side.

John Smith & Co.
Dealers in
Watches, Clocks and Jewelry,
Bowton, Texas.



Back of Circular.

Something for nothing is what everybody is anxious to get, but not to give. And your chance of getting it can be measured by the likelihood of your giving it. Remember this when you read offers to sell watches cheap, made by people at a distance and of whom you know little or nothing. If you try them you will pay well for what you get, and you won't get what you want! Their advertisements are misleading. In order to further their ends, they naturally offer the goods which have the best reputation. In filled cases, for instance, they quote the celebrated Jas. Boss case, which is the best known and has been the jewelers' standard for forty years. Most people upon casually reading the advertisements would think they really did furnish Jas. Boss Cases. The cases they usually send, however, are not to be compared with Jas. Boss cases in any way. Frequently they supply a case which is not a filled case, merely electroplated, although they give with it a so-called guarantee that it will wear many years. What good is a guarantee unless given by a responsible party? Jas. Boss cases are made by the Keystone Watch Case Co., of Philadelphia, Pa., and its guarantee you can rely on; it never guarantees a case which does not contain enough gold to justify the guarantee.

The Jas. Boss case is so well known and its reputation is so great that an effort is often made to sell other cases under its name—and some of these cases have been sold with a fraudulent guarantee in them, stating that they are Jas. Boss cases when they are not.

If you want a watch, the sensible thing to do is to go to a jeweler who lives among you, who knows his business, and who has a reputation to keep.

JOHN SMITH & CO.,
Dealers in Watches, Clocks and Jewelry,
BOWTON, TEXAS.

Remember that Jas. Boss cases are the only ones which are fitted with the celebrated Non-pull-out Bow or ring—the only bow which cannot be pulled or twisted off. As shown in the illustration the bow has a groove on each end. A collar runs inside the pendant (stem) and fits into the grooves, firmly locking the bow to the pendant so that it cannot be pulled or twisted off.



(over)

Nearly a million and a half of these circulars distributed in three months, and still the orders come.

We will send you FREE, with your name printed on them, as many as you think you can use to advantage.

Keystone Watch Case Company
19th and Brown Streets, Philadelphia

D. SCHRODER & Co.

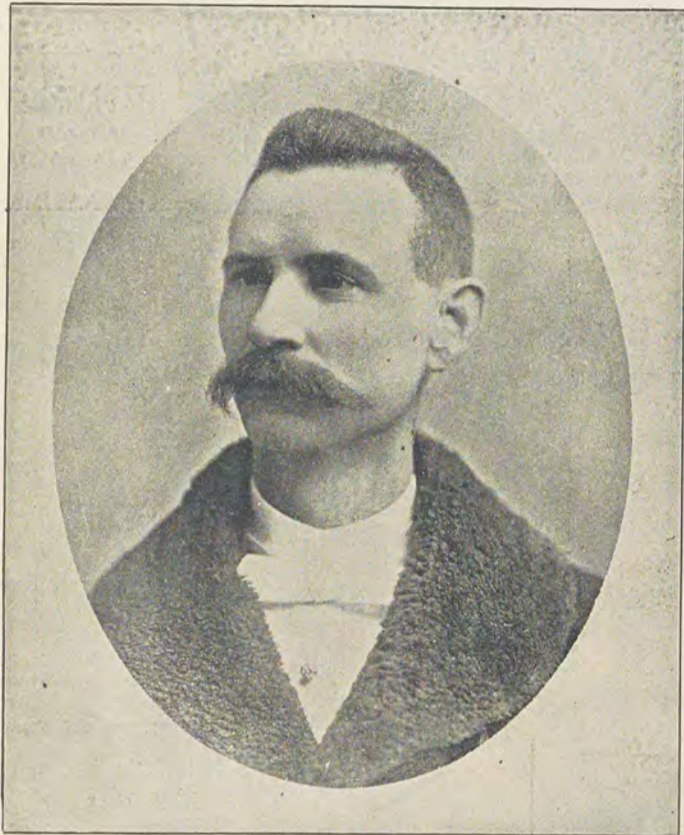
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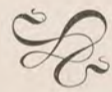
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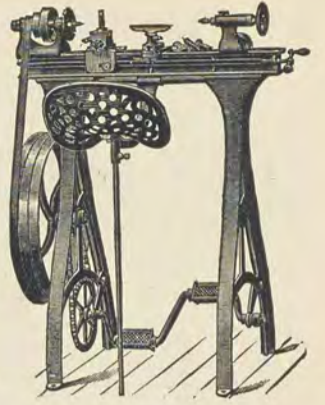
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11 Jewels in Settings, Patent Regulator, Breguet Hairspring, Double Sunk Dial, Red Marginal Figures, Compensation Balance, elaborately Damaskened. Exact appearance of a full-jeweled movement.

Catalogue price, \$11.00.



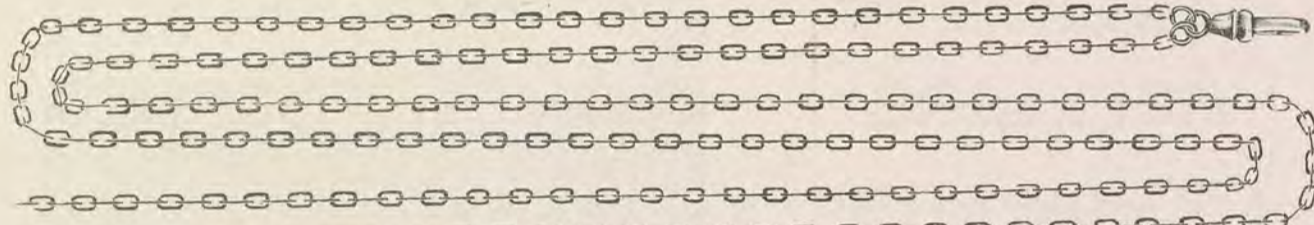
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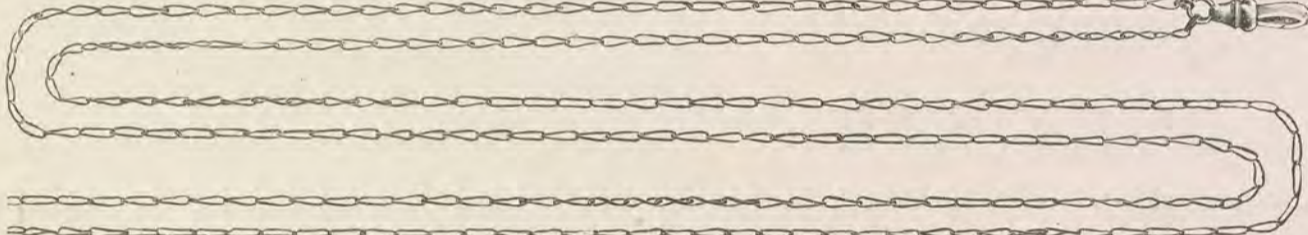
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7 Jewels, Compensation Balance, Sunk Second Dial, Lever Setting, handsomely Damaskened. (This movement and No. 19 are made for our exclusive use.)

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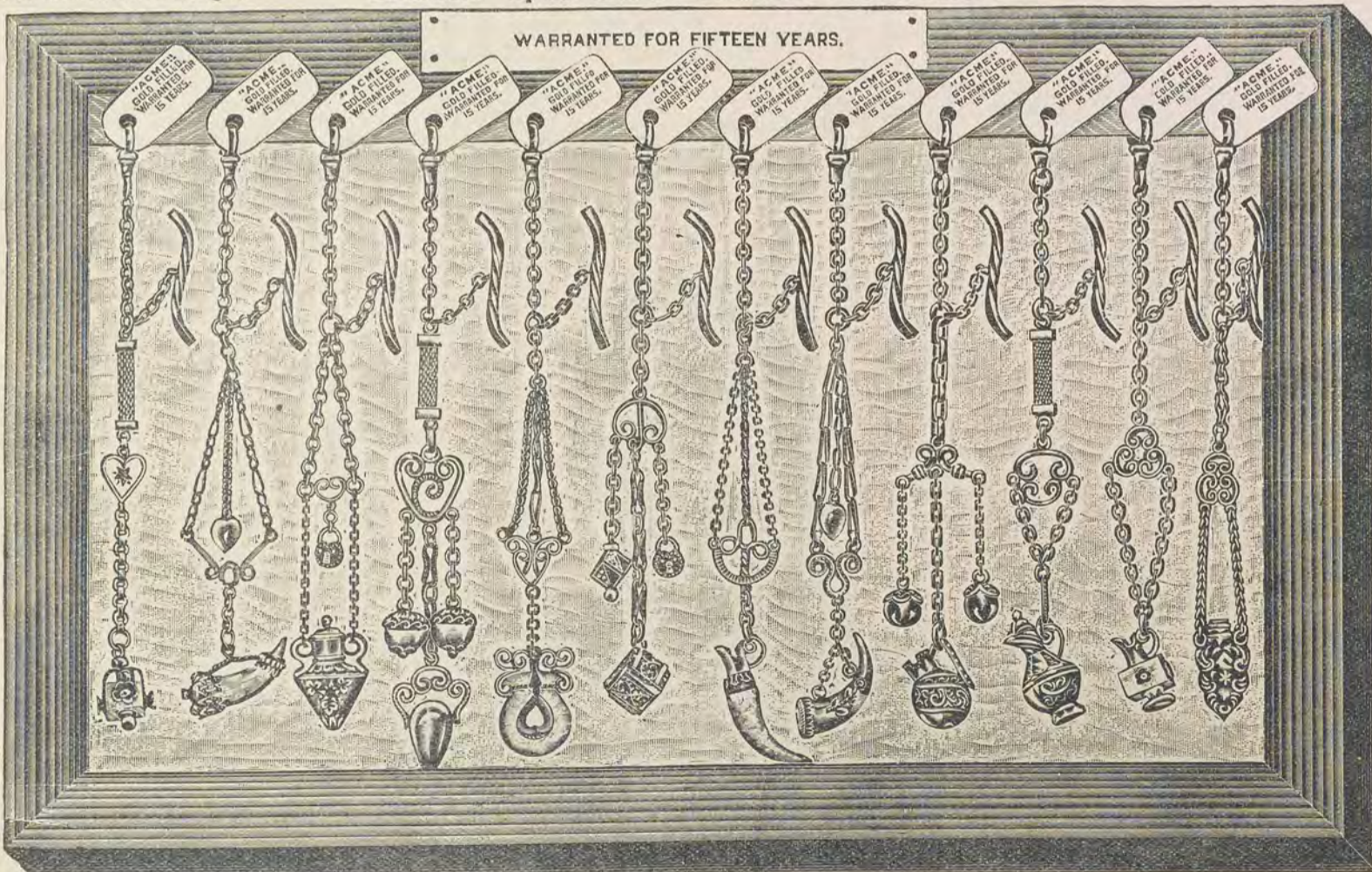
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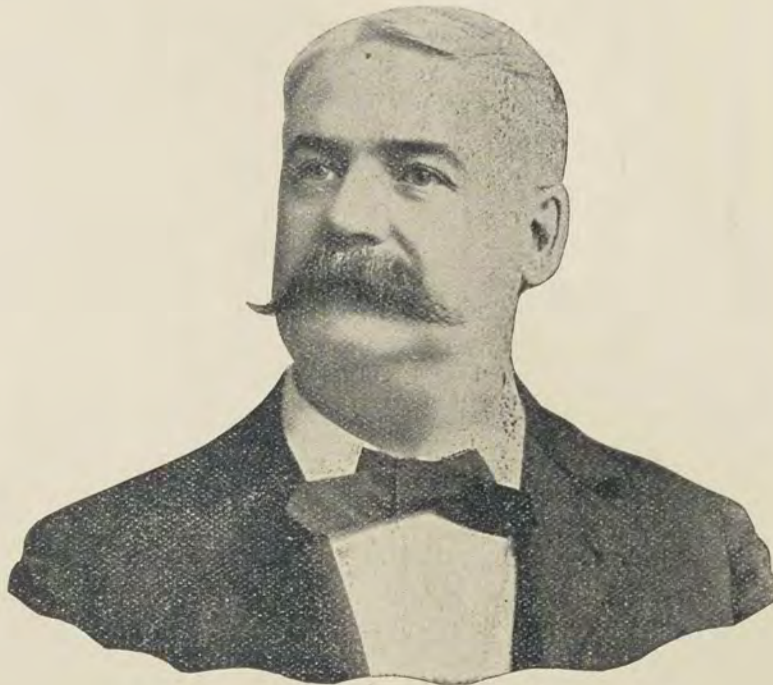
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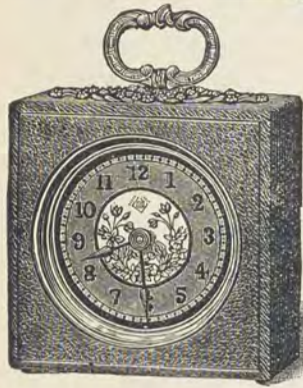
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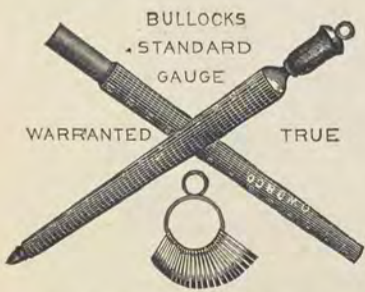
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Ask your dealer for our tools and above articles in particular. On receipt of five cents in stamps and business card, we will mail to any address a copy of our catalogue containing over one thousand (1000) varieties of fine tools for watchmakers and jewelers.

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Accurate and Durable.

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Governed by your regulator or our master-clock.
Never affected by change in the weather.
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Joliet Electrical Mfg. Co.,
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Prices reasonable? Yes.
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Yes.

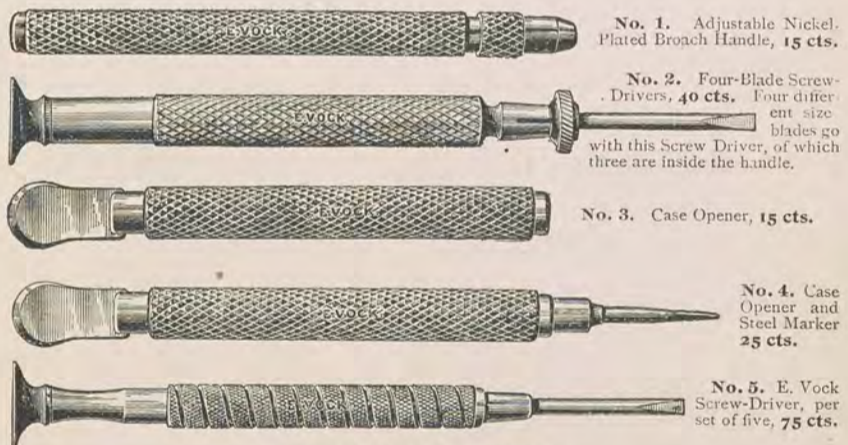
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89
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M. DORENFELD,
 "My Jeweler."



Seattle, Wash.,
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Mr. Bowman is possessed of a magnetism which holds a crowd, who almost seem compelled to purchase.

I fully appreciate what he has done for me, and cheerfully recommend him to any one desiring to realize readily on a stock of jewelry.

Yours very truly,
 W. G. GILGER.

NORWALK, OHIO, October 5, 1894.

Having very recently purchased a stock of goods in this city to the amount of \$6,500, and wishing to remodel and improve my store, I concluded to have a reduction sale so as to realize some ready cash with which to make the improvements; also to dispose of a great many undesirable goods that had been accumulating in the stock the past ten years. I secured the assistance of Mr. C. W. Bowman, of Kansas City, to conduct the sale, and the unexpected results of his efforts are ample proof of his superior abilities as a jewelers' auctioneer, we having sold \$3,200 worth of goods in one short week, netting me a handsome profit over and above cost of goods and all expenses of the auction.

I most cheerfully recommend Mr. Bowman to any one wishing to reduce stock, close out, remove, or in any way wishing to realize on a stock of jewelry in these depressed times.

Yours very respectfully,
 S. J. GILGER.

C. W. BOWMAN, Jewelers' Auctioneer,

613 Keith & Perry Building, Ninth and Walnut Sts.,
 KANSAS CITY, MO.

Any jeweler who has a good reputation, a good location, a good stock of goods, and will follow my instructions, I will guarantee cost and in most cases a profit, and will also guarantee to leave jewelers' reputation as good as I found it, as they will have no reaction from bad goods. Auctioneers who guarantee so much generally sell a lot of trash that they have shipped in, and leave your goods on hand. Read the letters inserted, and if you wish I will send you two hundred from the leading jewelers of the country. I have never made a failure of a sale, and have the proof for the statement. As I am a practical watchmaker and jeweler, I can explain the quality of your goods intelligently. I make a specialty of jewelry. Write me, giving the size of your store room, amount and character of stock, and how long you have been in business, and I will tell you just what to expect.

I am a practical watchmaker and jeweler, thoroughly versed in all lines of the business. I have never made a failure of an auction sale. Can furnish many such references as ones above from jewelers for whom I have conducted sales. Letters addressed to me at my office during my absence will be forwarded and answered at once. All correspondence strictly confidential. Write for particulars.

A BEAUTIFUL AND ACCEPTABLE HOLIDAY PRESENT

THE REGINA MUSIC BOX



Regina Music Boxes
 Play Thousands of Tunes by means
 of Indestructible Metallic Disks.
 Purity & Volume of Tone Unequaled.

Plays all the Latest Songs.

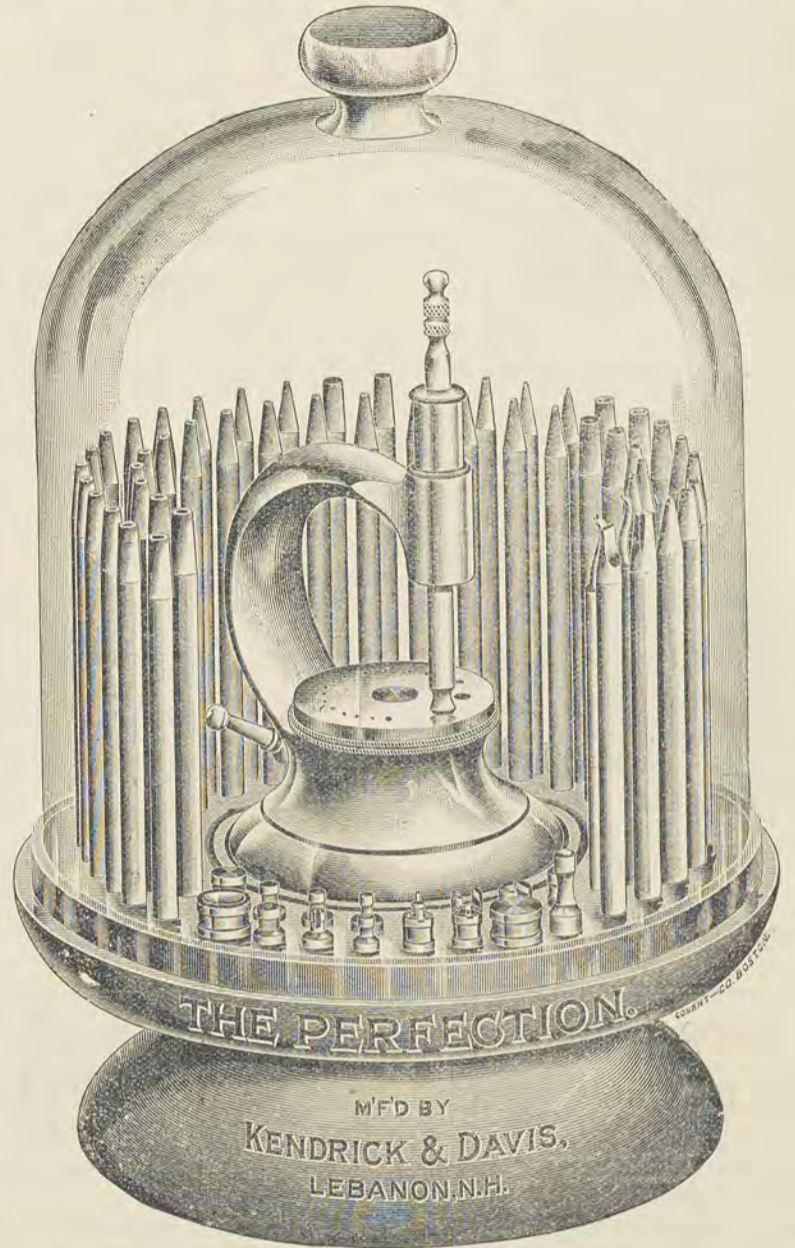
New tunes issued every week. Over one thousand are now ready, including dances, operatic and all the popular airs of the day.

It is a musical novelty, rendering on one or two accurately tuned steel combs the most beautiful music, and playing an unlimited number of tunes.

It is the first and only music box manufactured in the United States, and far surpasses the finest imported ones. The mechanism is of wonderful perfection and so strong and well finished that with ordinary care it will last for a lifetime. It runs fifteen minutes with one winding. All its parts are interchangeable. The cases are ornamental and highly polished. The tune-sheets are indestructible, being made of metal and are easily adjusted or changed. Send for illustrated catalogue.

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 194 Broadway, New York.

The Perfection Staking Tool

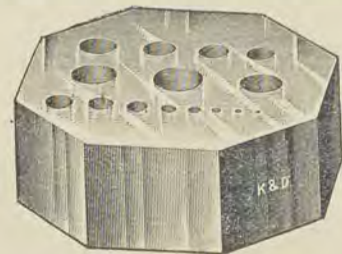


The Latest, The Best, and up-to-date in every respect. The result of patient study, the finest machinery and the most skilled labor. There are 54 punches, 16 stumps and a special tool for handling the punches, whereby they are protected from the moisture of the hands.

Ask your jobber to show THE PERFECTION. Compare it with all other Staking Tools as to range of work, accuracy and finish of all its parts.

Our Latest! A GOOD STAKING BLOCK.

Made of Tool Steel and very hard throughout. Mirror finish and nickel-plated.



We manufacture these in variety; round, and in different styles, with and without hub.

A full line of Standard Dust-Proof and Birch Keys always on hand.

KENDRICK & DAVIS

Lebanon, N. H.

Roller Remover

Will fit any watch, remove and replace the roller without disturbing the hair spring. For sale by Jobbers or sent post paid on receipt of \$1.00.



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PATENTE,
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WANT
A GOOD
BOOK?

Over 2200 Different Monograms.



More than
6000
Combinations.



Book indexed, so you can find any 2 or 3 letter design in 10 seconds' time, also contains specimens of Old English and Script Text, Ornamental and Cipher Monograms. If book is not found satisfactory, money will be refunded. Sent prepaid on receipt of \$1.00. References, any Chicago jobber.

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ORPHEA Music Boxes

Are the sweetest, most complete, tone-sustaining, durable, and perfect Musical Boxes made, and any number of tunes can be obtained for them. Delightful family, wedding, anniversary, and holiday gift. Buy direct of the makers, the oldest, most reliable, and responsible firm. No Music Box can be guaranteed without Gautschi's patented Safety Tune Change and Parachute. Manufacturer's Headquarters for Gem and Concert Roller Organs; also Symphonions and Polyphones, Lowest Prices. Factory estab. 1824.

OLD MUSIC BOXES CAREFULLY REPAIRED.

GAUTSCHI & SONS 1030 CHESTNUT ST.
PHILADELPHIA.



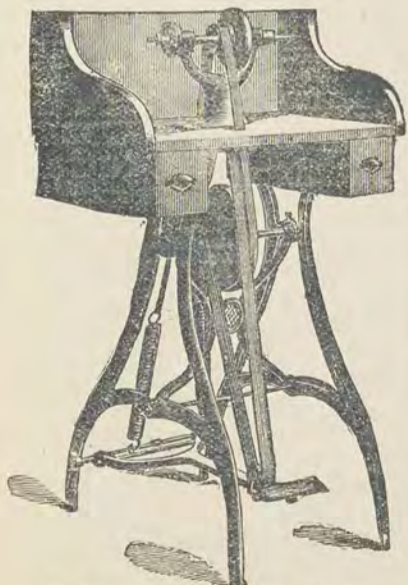
G.F. Wadsworth,
Watch Case
Manufacturer
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Everything in
the line of
Watch Case
Repairing,
Gold and Silver
Plating,
Satin Finish,
Engraving
and
Engine Turning
Old Cases
Made New.
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reasonable.

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State Street,
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Brown's Patent Polishing-Lathe

High Speed. Easy Running.



No. 2 Brown's Improved Polishing-Lathe.
Old machines taken in exchange.

Charles H. Field, Providence, R. I.

Look Here! Bargains just when you want them.

Special 90 day sale of Mainsprings. Our hard time prices are 85c. dozen or \$9.00 per gross, net cash. Every spring warranted. Send 10c. for sample pack of Star Hard-Solder Flux. Best in the world. Address all orders to

M. MENDENHALL, North Star, Ohio.



RIES'S "STANDARD" TIMING-WASHERS first quality. They "fit" and are graded in sizes and weight. 50c. Instructions and samples on receipt of stamp.

My "new" Balance Screw-Driver holds the screw, large or small, 25c.; my graver handle for turning, 25c. All of the above articles "are up to date." If your jobber don't keep them, send and get them direct. Correspondence invited. **F. C. RIES,** Macon, Ga.

10,000 Jewelers say
TIDD'S REPAIR GUARANTEE
WILL increase repairing.



Cut to fit in 6, 16 and 18 size cases, with your name and address on them, by mail, to any address, on receipt of price: \$1.00 for 500, \$1.50 for 1000.

TIDD & CO., Columbiana, O.



Hand-Power Dynamos

with machine-cut gear wheels, for \$15, \$20 and \$25.
"The Wonder," a foot-power dynamo with bicycle motion, includes Ideal Polishing Lathe and Champion Demagnetizer. Price for the combination, \$50.
Anodes and solutions at bed rock prices.
Motors, storage cells.
Nothing pays in this day as well as a good plating outfit. Full instructions free with each dynamo.

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GLENOLDEN, PA.
Glenolden is a suburb of Philadelphia, Pa.



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NJEBO—A Game for the Holidays.

It is highly recommended and is without a doubt the most instructive game in the world. Sample pack (enamel), by mail 25 c. One dozen packs of the same to dealers, \$1.75. Sent at once prepaid, together with window sign with each dozen, on receipt of price. Every retail jeweler should have my patent Ring Adjuster in stock. It lets the ring pass over large joints with ease; is a perfect guard for the ring, besides holding the top of ring in desired position. One dozen, assorted sizes, solid to K. gold, \$3.00 net. One dozen, metal, assorted sizes, 75 c. net. Ask your jobber for them, or I will send on receipt of above price (8 c. extra if registered). Retail price, fitted, gold, 50 to 75 c. each; metal, 25 c. each. Look in July or former KEYSTONES for recommendations, etc. Address, **Chester H. Wells,** Jeweler, Meshoppen, Pa.



Plymouth, Pa., Nov. 19, 1894.
The auction sale made by Col. St. Clair Fechner in the hardest times ever seen in this town, has averaged over 47 per cent. profit on all goods sold by him.
JOHN P. HARRIS, Jeweler.
Address,
St. Clair Fechner, Washington, D. C.

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PATENTED.
Complete protection against Dust, Wind, Gases, or Strong Light. Indispensable for all. The best fitting device in the world, and the only one with protected surface which can be cleaned without blurring.
Sold everywhere by Opticians, Jewelers, Druggists, and Hardware Dealers. Colors: Clear, Smoke, Blue or Green.
Samples by mail 50 cents.



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THE LLOYD PATENT CASE



THE MOST POPULAR PRACTICAL REFERABLE
REDUCED PRICES:
No. 121, \$13.00 per gross.
No. 122, 16.00 " "
MANUFACTURED ONLY BY
H. E. KIRSTEIN & CO.,
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O'HARA WALTHAM DIAL CO. DIALS WALTHAM, MASS.

When you have tried all other drills, try **Johanson's Superior Pivot-Drills** and they will do the work. They are made expressly for American watches, and are guaranteed to drill anything of a blue temper. Put up in cylindrical boxes, each containing one dozen assorted drills. Price per dozen, 50 cts.
For sale by all the leading material jobbers and by the manufacturer,
A. W. JOHANSON, 326 Wells St., Chicago, Ill.

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Model 34 used but little. Just as good as new. 94 pattern. Cost \$125. Light and strong. We must have money, so offer it for \$75. Send \$5 and we ship C. O. D. Big chance.
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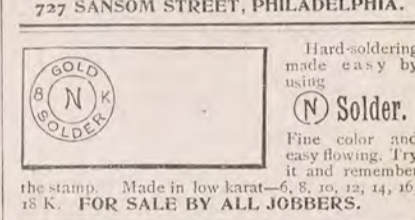
J. Menegay & Son, Watch Case Springs



ESTABLISHED 1866.
FRITON BROS. MAKERS OF Fine Diamond Mountings, ARTISTIC ENGRAVERS AND DESIGNERS.
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SEARS & FENIMORE,

Late in charge Repair Dept. Phila. Opt. & Watch Co.,
Watch Case Makers and Jewelers.
Old cases made new. English cases altered to American stem-winding. Chains repaired and made over. Engine-turning and engraving. Estimates given. Prices reasonable and work guaranteed.
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Hard-soldering made easy by using **N Solder.** Fine color and easy flowing. Try it and remember the stamp. Made in low karat—6, 8, 10, 12, 14, 16, 18 K. **FOR SALE BY ALL JOBBERS.**

AWARDS FOR H. H. Heinrich's Marine Chronometers.

CHICAGO, 1893 PARIS, 1889 BERNE, 1859
A large stock of new and second-hand Chronometers always on hand to rent or for sale at moderate prices. Repairing, springing and re-adjusting chronometers and fine watches for the trade.
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heard of the excellent Gilding, Coloring, Plating in Gold and Silver, Oxidizing, etc., that we are doing every day for the Jewelry Trade. We want every one who has

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and believes in our nineteenth, nearly twentieth, century methods, in which every invention which promises merit is tested and retained, should they prove worthy.

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to give the best work at the lowest prices, consistent with good workmanship and fair, though small, profit. An estimate or price-list can be had by addressing

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With our extensive connections, importing, exporting, manufacturing and jobbing, depending on no particular line, concentrating all under one general management, we avoid many unnecessary outlays, and are enabled to handle a very heavy business at the smallest expense, always permitting us to quote lowest prices possible.



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MANUFACTURING AND WHOLESALE JEWELERS,

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GREAT
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illustrates, with special list prices, watches, diamonds, jewelry, clocks, silverware, tools, materials, optical goods, findings, etc.

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illustrates and quotes everything that the practical watchmaker, engraver or manufacturer requires.

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containing special bargain offerings from our various departments, is mailed to the trade regularly.
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**48-50 MAIDEN LANE, and 33-35 LIBERTY STREET,
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ESTABLISHED for the sale of FINE ART, PAINTINGS, ENGRAVINGS, ETCHINGS, ART CHINA, CUT GLASS, DRESDEN, CALSBAD, ROYAL WORCESTERS AND BELLEEK WARE, ART NOVELTIES IN FANCY GOODS, IMPORTED BRIC-A-BRAC.

We are experienced Salesmen in the above class of Goods, competent to handle large stocks to the best advantage.

Our terms are liberal, considering the quality of service rendered. Our method of conducting a sale will insure you against loss.

We make sales for the legitimate Trade only, in their established places of business.



W. M. DAVIS,
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A SPECIAL FEATURE of our business:—
Watches, Diamonds, Jewelry and Fine Silverware.

Our practical knowledge and recognized ability in the above line have secured for us the endorsement not only from the wholesale manufacturing trade, but from retail jewelers for whom we have conducted sales, whose endorsements and letters are on file in our office.

We guarantee to conduct our sales in an honorable and businesslike manner, securing you against loss. We are thoroughly responsible, and furnish the highest references of any firm in our business in the United States.



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WE PAY ALL OUR OWN EXPENSES.

GUARANTEE TO MAKE YOUR SALE WITHOUT LOSS.

SEND FOR OUR BUSINESS PAMPHLET.

CONSULT US BEFORE PLACING YOUR SALE.

Gold Spectacles—Made by Patented Process.

Gold Eye-Glasses

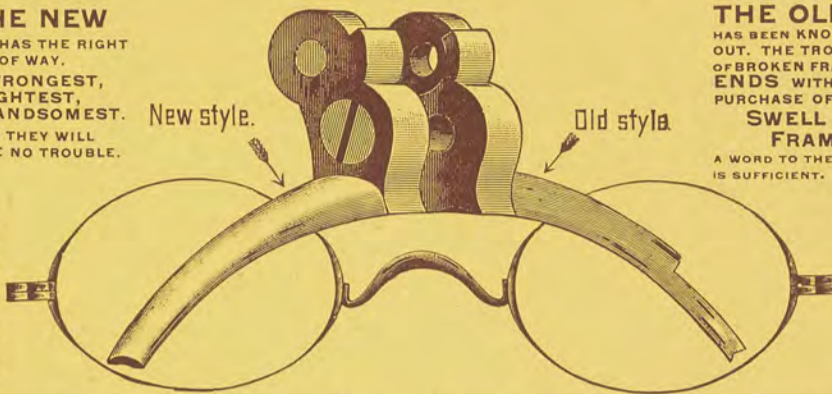
THE SWELL AT JOINT AND NOSEPIECE IS ONE PIECE,

ROLLED ON BY PATENTED MACHINERY AND PROCESSES, THE RESULT OF YEARS OF EXPERIMENT AT ENORMOUS EXPENSE.

ALL SPECTACLES MADE WITH BROAD SWELL NOSES S. S. & C., VERY POPULAR, SHOWY AND COMFORTABLE.

THE NEW HAS THE RIGHT OF WAY. STRONGEST, LIGHTEST, HANDSOMEST. AND THEY WILL GIVE NO TROUBLE.

No Patched Ends



THE OLD HAS BEEN KNOCKED OUT. THE TROUBLE OF BROKEN FRAMES ENDS WITH THE PURCHASE OF SWELL FRAMES. A WORD TO THE WISE IS SUFFICIENT.

No More Breaks

OUR STOCK OF GOLD EYE-GLASSES, SPECTACLES AND RIDING BOWS IS COMPLETE.

ALL THE LATEST FORMS OF PATENT EYE-GLASSES, STATIONARY OFFSET AND ADJUSTABLE AND BAR SPRINGS AND THEIR COMBINATIONS, AT POSITIVELY THE

LOWEST PRICES, GREATEST VALUE AND LEAST MONEY.

THEY WILL PLEASE YOUR CUSTOMERS EVERY TIME. YOU CAN BUY THIS SUPERIOR LINE CHEAPER THAN THE OLD STYLE AND INFERIOR GOODS WITH PATCHED APPEARANCE SOLD ELSEWHERE.

MAKE NO MISTAKE; BUY THE BEST FOR THE LEAST MONEY. YOU WILL COME AGAIN.

THE TARIFF IS ADJUSTED FOR 1894.

WE HAVE JUST RECEIVED OUR FALL IMPORTATION OF

AUDEMAIR
Opera, Field and Marine Glasses,

WHICH WE OFFER AT

REDUCED PRICES

TO CORRESPOND WITH THE NEW TARIFF.

ALSO SOME GREATER REDUCTIONS TO CORRESPOND WITH THE HARD TIMES, VARYING FROM 5 TO 33 PER CENT. ON FORMER PRICES.

ALUMINUM Opera-Glasses, MOROCCO, ENGRAVED, REPOUSSE AND ENAMELED, \$3.00 UP.

THE LATEST IMPROVEMENT, THE
AUDEMAIR Opera-Glass



with Patent Attached Telescopic Focusing Handle.

THE GREATEST SUCCESS—SELLS AT SIGHT. CALL IN AND SEE IT, OR SEND FOR PAMPHLET.

THE **AUDEMAIR**

THE BEST OPERA-GLASS TO BUY.

OPTICAL CONSTRUCTION GUARANTEED.

FINEST ACHROMATIC LENSES.

THE LARGEST VARIETY.

THE HANDSOMEST MOUNTINGS

IN PEARL, LEATHER, ALUMINUM, METAL, SILVER AND GOLD.

U. S. Army
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REDUCED.

SEND FOR PRICE-LIST.

BE SURE TO GIVE US A CALL, AND WE WILL BE MUTUALLY BENEFITED.

Our Prescription and Special Order Department

IS THE BEST APPOINTED IN THE UNITED STATES.

Great Features { Accuracy, Promptness, Low Price.

BY OUR SYSTEM OF HANDLING PRESCRIPTION WORK ERRORS ARE NEXT TO IMPOSSIBLE. OUR STAFF IS COMPETENT TO RETURN WORK WITHIN 24 HOURS. OUR FACILITIES

FOR MAKING SPECIAL FRAMES AND OUR LARGE STOCK OF BOTH FRAMES AND LENSES TO DRAW FROM PLACE US IN A POSITION TO SATISFY YOUR WANTS. GIVE US A TRIAL AND BE CONVINCED.

WE CARRY IN STOCK SPECIAL SIZES (00, 0, 1, 2, 3) AND WEIGHTS IN GOLD 10 AND 14 K. SPECTACLES AND EYE-GLASSES TO FIT FACIAL IRREGULARITIES.

OUR PERFECTED FRAME BOARD IS WITHOUT AN EQUAL. INDISPENSABLE TO AGGRESSIVE OPTICIANS. GIVEN FREE WITH SIX DOZEN SPECIAL FRAMES.

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OUR GRADUATES ARE THE SUCCESSFUL OPTICIANS.

WE TEACH BY IMPROVED METHODS. COMPREHENSIVE, PRACTICAL, NON-CLASSICAL.

OBJECT LESSONS. MECHANICAL DEVICES. ANATOMICAL MODELS. ALSO A B C ON LENSES, THEIR REFRACTION AND COMBINATION.

DO NOT PROCRASTINATE. WE MEAN YOU.

START IN NOW AND YOU WILL REAP THE BENEFITS.

CLASSES COMMENCE THE FIRST TUESDAY OF EACH MONTH.

SEND FOR APPLICATION BLANK NOW.



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Your Last Chance



THIS JAS. BOSS 14 K. CASE

either Open-Face or Skylight, costs only **\$8.00**, according to Key. You can have them in plain polished, engine-turned, engraved or enameled, without extra charge for the ornamentation.



THIS LEADER SILVER CASE

plain or engraved, costs only **\$3.00**, according to Key.



THIS SILVEROID CASE

costs only **\$1.00**, according to Key.

Jobbers have still on hand some of the pretty and ever-salable **Chatelaine Watch Cases** made in limited supply by us to meet the inevitable demand for this all-the-time holiday specialty. The cases this season are as temptingly low-priced as they are attractive, and the last chance to profit by them now confronts you. Holiday retail prices for these goods would mean an exceptionally big profit. If you hurry up your order, you may yet secure from a jobber a portion of the remnant.

Keystone Watch Case Company

JUST RECEIVED FROM PARIS

A LARGE INVOICE OF

AUDEMAIR FIELD AND MARINE GLASSES

IT WILL PAY YOU TO INVESTIGATE INTO THIS LINE.



STAMPED ON EVERY PAIR. TRADE MARK.

THE BEST AND MOST PROFITABLE. SUPERIOR STYLES, CONSTRUCTION AND LENSES.

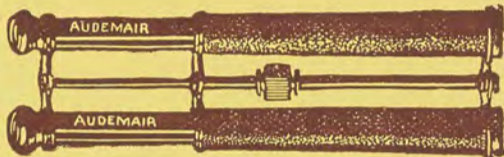


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WEIGHT, WITH CASE, 8 OUNCES. COMPACT. WIDE ANGLE. LARGE FIELD. LOW PRICE.

SEND FOR PRICE LIST.

A FULL LINE OF Telescopes FOR SEA AND LAND.



The Acme of Perfection.

AUDEMAIR Binocular Telescopes.

POWERS FROM 8 TO 18 TIMES.

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WRITE FOR BLANK APPLICATION.

Our stock of special spectacle and eye-glass frames for fitting all conditions is most complete in stock; no waiting for your prescriptions to be filled. Our regular stock is so well known that it sufficeth to say that we shall continue to keep up the standard, having kept the best to the last. We now call your attention to a thing of beauty, which will prove a joy forever to the wearer, also to the dealer who sells them. We mean our new patent swell-end eye-wire gold frames, both spectacles and eye-glasses. They fill an aching void in the dealer's heart when his regular light gold frames constantly *come back broken*. These swell-ends do not play such tricks. They are light and handsome. The graceful swell gives great strength just where it is needed and removes that patched appearance where the re-enforcements have to be soldered on the ends of other makes. We have no patches on our ends, the eye-wire being one solid piece. The swell is attained by patented rolling device, which imparts great toughness to the metal. Many dollars' worth of time is saved the dealer who guarantees his gold frames and formerly had to re-solder broken ends. The people say, "We want no other," and we advise you to buy no other. These goods sell; others remain a long time for sale. We also advise you to see the *Audemair* Trial-Case; that's all that's necessary. We remain

Yours for good business,
SPENCER OPTICAL MFG. CO.,
New York.

WHEN IN THE CITY WE HOPE YOU WILL CALL ON THE

S.O.M. Co.

Read the Open Letter

HEED THE GOOD ADVICE, OVER 400 HAVE DONE SO ALREADY.

DEAR SIR:

Permit us to have a few personal words with you. We wish to call your attention to a danger you are in of losing your grip on the *twentieth century optical trade* if you are not a skilled refractionist. The public now demand skill in the fitting of their eyes. Have you got a good stock of this? We furnish this article, but can not ship it, and we invite you to come to us for it. We promise to use the whole time of our Optical Course in imparting to you skill and practical knowledge. Not a moment will be wasted in non-essential theorizing or classical deductions. Our graduates claim they are best suited if they learn to fit astigmatism, not dissect it, and to correct asthenopia in muscles, not to analyze the word. Our students are gratified with a skill beyond their expectations, and are successful. The volume of prescriptions coming through our special department proves the above to be true in every detail. Some are not collegiates, nor intellectually brilliant, but they can master complications in fitting which puzzle others. Our class-rooms are filled with devices for demonstrating, and our lectures are more of action than oral; that is to say, we *show how* more than tell how. Our prescription department is the best equipped of any in this country, and handles the greatest volume of special business. A large force is kept busy to keep up to *date*. The inspector of finished work is like a machine in accuracy. No errors can pass his eagle eye.

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15 Maiden Lane N.Y.

OPTICAL FACTURING CO.

THE BEST-PAYING INVESTMENT FOR THE SUMMER SEASON

THE AUDEMAIR

Aluminum Field and Marine Glasses



Greatly Reduced Prices

CONSTRUCTED WITH GREAT ACCURACY AS TO THEIR OPTICAL PERFECTION. THE CROSS-BARS OF SUFFICIENT THICKNESS TO INSURE STRENGTH AND DURABILITY. YOU WANT THE BEST SELLERS. SEE THAT YOU GET THEM. HAVE STOOD TEST TEN YEARS. NO EQUAL FOR THE MONEY.

THE OUTLOOK

Bright, with a dark background—that's what the outlook is. After a year of waiting the nervous query, "What of the night?" has at last given way to the more cheery one, "What of the morning?" Gradually the business darkness is disappearing—a promising dawn is already visible, and a day of industrial brightness is presaged. During the past month the two densest clouds have been lifting. The tariff question will soon cease to be a disturbing factor, and the monster railroad strike—that volcanic culmination of labor discontent—has gone into history. All circumstances are now favorable for the rapid recovery of the body commercial from its prolonged fit of nervousness and depression, and abundant crops are proving an effective restorative.

Your present duty is twofold—to convince yourself that the crisis is past and to force the recovery. **We** are doing more than our part in this direction. We have put on the market watch cases the most tempting ever shown, and, as a further incentive to buyers, we have **reduced prices** to an almost irresistible minimum. **We** supply the watch case ingredient of the business tonic; it is for **you** to administer the specific. Communicate with your jobber.

Keystone Watch Case Co.