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THE KEYSTONE

IN THE INTEREST OF THE JEWELRY TRADE

Volume 8.

Philadelphia, September, 1887.

Number 9.

Circulation, 22,368

Enumerated by States and Territories and in the Dominion of Canada.

Alabama	131	Massachusetts	1196	Texas	359
Arkansas	121	Michigan	905	Vermont	172
California	554	Minnesota	499	Virginia	203
Colorado	162	Mississippi	104	West Virginia	135
Connecticut	366	Missouri	804	Wisconsin	646
Delaware	49	Nebraska	409	Arizona	17
Dis. of Columbia	87	Nevada	30	Idaho	25
Florida	105	New Hampshire	201	Indian Territory	2
Georgia	244	New Jersey	449	Montana	40
Illinois	1529	New York	1795	New Mexico	60
Indiana	738	North Carolina	144	Utah	42
Iowa	924	Ohio	1249	Washington	56
Kansas	614	Oregon	110	Wyoming	20
Kentucky	266	Pennsylvania	1242	Dakota	201
Louisiana	173	Rhode Island	395	New York City	1769
Maine	593	South Carolina	109	Philadelphia	692
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WE LEAD, OTHERS FOLLOW.

DETROIT PLUSH TRAY AND BOX COMPANY.

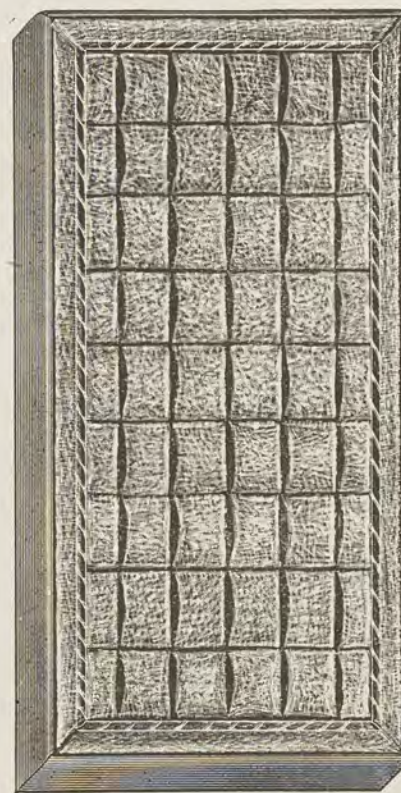
BURT & HURLBUT, Proprietors,

DETROIT, MICHIGAN, U. S. A.

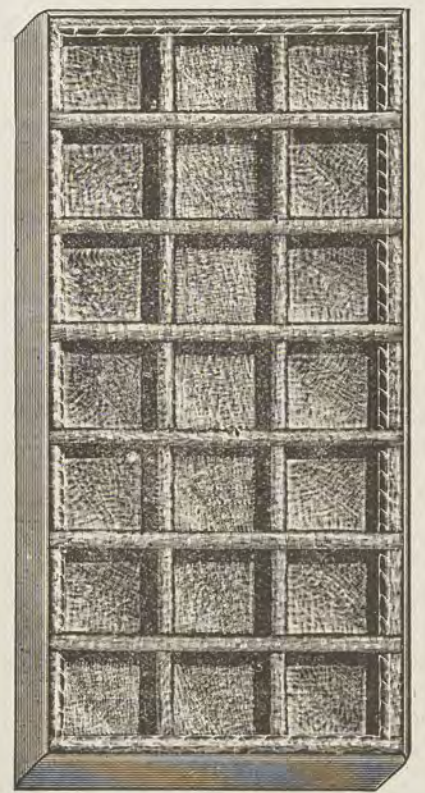
ASK THE JOBBERS TO SEE THEM.



No. 130. Watch Tray, 4 1/4 x 4 1/4—\$2.75.



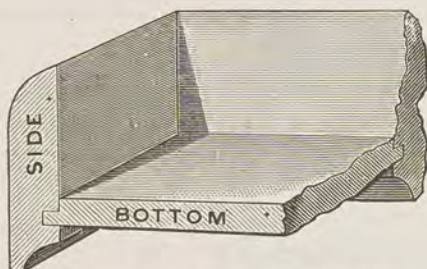
No. 121. Ring Tray, 5 1/2 x 11 1/4—\$1.75.



No. 151. Locket Tray, 5 1/2 x 11 1/4—\$1.75.

NOTICE.

Highly polished
Cherry
Mahogany
finished stack
Trays.



This cut represents a section of our new Tray.

Silk Ruby
Plush Lined
Mahogany finished
border with
inlaid Silk Cord.

HAVING enlarged our factory, and added new machinery and greatly increased our production, we are prepared to fill all orders for both regular and special odd size Trays and boxes promptly. Our Trays are all made of cherry, mahogany-finished, dove-tailed corners, [recess bottom] ruby, silk plush-lined mahogany-finished border, with silk cord inlaid in the wood, and highly-polished. All Trays are stack Trays.

Our silk plush boxes are made in the best possible manner, covered with fine silk plush, lined with fine satin of beautiful corresponding shade. We make all kinds of plush boxes, and at prices that will sell them. Will forward list on application. Our new catalogue will be out September first. We also make Trays of all foreign and domestic woods to special order. Antique Oak, Redwood, Rosewood, Ebony, Maple, etc. If you want fine handsome Trays at the right price, send us your order, and mention this paper,

DETROIT PLUSH TRAY AND BOX CO.,

BURT & HURLBUT, Proprietors,

DETROIT, MICH., U. S. A.

120	Ring Tray,	99	Rings,	- - - - -	11 1/2 x 11 1/2	\$2 75
120 B	" "	Band	"	- - - - -	11 1/2 x 11 1/2	3 25
121	" "	45	"	- - - - -	5 1/2 x 11 1/2	1 75
121 B	" "	Band	"	- - - - -	5 1/2 x 11 1/2	2 00
122	" "	63	"	- - - - -	7 1/2 x 11 1/2	2 25
122 B	" "	Band	"	- - - - -	7 1/2 x 11 1/2	2 63
123	" "	135	"	- - - - -	15 1/2 x 11 1/2	3 50
123	" "	Band	"	- - - - -	15 1/2 x 11 1/2	4 13
124	" "	Fancy all Plush,	35 Rings,	- - - - -	8 1/2 x 11 1/2	2 75
130	Watch Tray,	Gents, 9 Holes,	- - - - -	- - - - -	11 1/2 x 11 1/2	2 75
131	" "	Ladies, 12 "	- - - - -	- - - - -	11 1/2 x 11 1/2	2 75
132	" "	Gents, 12 "	- - - - -	- - - - -	15 1/2 x 11 1/2	3 50
133	" "	Ladies, 15 "	- - - - -	- - - - -	15 1/2 x 11 1/2	3 50
140	Bracelet Trays	- - - - -	- - - - -	- - - - -	11 1/2 x 11 1/2	3 25
141	" "	- - - - -	- - - - -	- - - - -	15 1/2 x 11 1/2	4 50
150	Locket "	- - - - -	- - - - -	- - - - -	11 1/2 x 11 1/2	2 50
151	" "	- - - - -	- - - - -	- - - - -	5 1/2 x 11 1/2	1 75
152	" "	- - - - -	- - - - -	- - - - -	7 1/2 x 11 1/2	2 25
153	" "	- - - - -	- - - - -	- - - - -	15 1/2 x 11 1/2	3 25
160	Charm "	- - - - -	- - - - -	- - - - -	11 1/2 x 11 1/2	2 50
161	" "	- - - - -	- - - - -	- - - - -	5 1/2 x 11 1/2	1 75
162	" "	- - - - -	- - - - -	- - - - -	7 1/2 x 11 1/2	2 25
163	" "	- - - - -	- - - - -	- - - - -	15 1/2 x 11 1/2	3 25
170	Chain "	- - - - -	- - - - -	- - - - -	11 1/2 x 11 1/2	2 50
171	" "	- - - - -	- - - - -	- - - - -	15 1/2 x 11 1/2	3 25
172	" "	Guard	- - - - -	- - - - -	11 1/2 x 23 1/2	4 50
173	" "	"	- - - - -	- - - - -	5 1/2 x 23 1/2	3 25
180	Thimble "	- - - - -	- - - - -	- - - - -	11 1/2 x 11 1/2	2 75
181	" "	- - - - -	- - - - -	- - - - -	5 1/2 x 11 1/2	1 75
182	" "	- - - - -	- - - - -	- - - - -	7 1/2 x 11 1/2	2 25
183	" "	- - - - -	- - - - -	- - - - -	15 1/2 x 11 1/2	3 50
190	Plain "	- - - - -	- - - - -	- - - - -	11 1/2 x 11 1/2	1 50
191	" "	- - - - -	- - - - -	- - - - -	5 1/2 x 11 1/2	1 00
192	" "	- - - - -	- - - - -	- - - - -	7 1/2 x 11 1/2	1 25
193	" "	- - - - -	- - - - -	- - - - -	15 1/2 x 11 1/2	1 75

Any size Trays made to order. Cost 10 to 20 per cent extra.
Terms—30 days.—Net; 5 per cent. of it paid in 10 days.

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QUESTION.

WHAT SHALL WE DO WITH OUR BOYS?

Suggestions in "Jack Knife Mechanics" by a man who remembers that he was once a boy.

It is only after "a baby is born to us" that the real relations and responsibilities of married life are truly presented, even to the most thinking minds. Previous to this, marriage is a sort of dazed hey day of enjoyment, giving and taking of new delights and confidences, glorious as a dream. But as the new living tie develops into life with its cunning, winning ways; learns to say, "Papa," "Mamma," and is so wholly dependent on us for everything that we learn and know, the responsibilities of our brief existence, our own hopes and ambitions become secondary to a paternal feeling, centering and culminating in the future of "our boy." All this yet is dreaming, comparatively, until the period of youth is established, and the boy from five to fifteen is developing. This is the period where the watchfulness of both parents must be unceasing and Argus-eyed. The future man is made or ruined in these ten years. Seeds for good or evil are now received to develop in the future into a garden or a wilderness. All right-minded parents express an ardent desire for the future of their children, and still but few possess the tact and ability to guide a boy properly at this critical age. Many parents exercise too much care and vigilance, are too strict, and not only make home irksome, but lead the child to resort to subterfuge and falsehood to get away from the place which should be, of all others the most attractive. Home is then looked to, not as the place where the greatest enjoyments are—a treasure-house of pleasures and joys—but a sort of necessity and refuge from storms, a place to get something to eat, and go to when you can't go anywhere else. Children raised under such conditions, never realize anything but positions of mediocrity in life, at the best, and the chances are four out of five that they will fall below this mark.

MAKE HOME ATTRACTIVE.

It should be the study of parents to make home enticing to their children, afford them cheerful and attractive enjoyments, and surround them with elevating influences. Such a course does not necessitate the purchase of expensive toys. A few well-selected toys are all right; they form a part of a child's treasures, and home the store house. But avoid such toys and rewards as lead the child away from home to enjoy them. Many ladies object to having their house "littered up" as they term it with shavings and only encourage such home amusement as make no dirt nor noise. Such persons will buy a box of letters or building blocks and fancy that a child

should have no excuse to tire of them. If to these, a little wheelbarrow or express wagon is added a child is supposed by such narrow-minded persons to have all the enjoyments earth can afford. Children need play rooms or a room for enjoyment as much as they need a sleeping room. It need not be large nor have all the modern conveniences, but it should be comfortable, and one of the requirements should be to keep it clean and in order. All this has a disciplining tendency for young minds, and affords them an opportunity to acquire a practical knowledge of the use of tools. Many of my readers have garrets and store rooms full of lumber and trash, which could at a trifling expense be converted into play-rooms and workshops for their children and not only convey useful instruction, but afford hours of healthy and elevating enjoyment. Throw out or dispose of the trash, and give them over to the little ones, it will be much better for you and for them. With this number the KEYSTONE commences a series of articles under the title of "Jack Knife Mechanics" by a thoroughly practical mechanic who knows how to do the work he describes.

JACK-KNIFE MECHANICS.

Under this title, THE KEYSTONE proposes to give a series of instructions in the use of tools to young boys, who have what is termed a "mechanical turn of mind." It is not intended to confine the instructions exactly to a knife of any kind, but to start with this simple instrument and by a series of steps, so to speak, lead a young boy to a practical knowledge of the use of tools which will not only be a source of recreation and pleasure for the time being, but a positive advantage to him for his whole life. There is no man, no matter what his financial condition or station in life, but would be the better for even an imperfect knowledge of some mechanical pursuit. Louis Philippe ex-King of France, supported himself in exile by a knowledge of locksmithing, and in our republican United States, I fancy but few would uphold the idea it was better to be a bad King, than a good locksmith.

In this series of articles, instruction will not be confined to wood, but metal working will also be treated on by a thorough, practical mechanic, who can do everything he writes about, and will avoid as much as possible, technical terms and employment of unnecessary tools. One feature, however, will be rigidly insisted upon, and that is system or method. After a short chapter on pocket-knives, he will give a simple lesson for the jack-knife, then an example of the method of producing something to show for one's work. It is not meant by this that it is absolutely in all cases to be insisted upon—that a boy should make a thing for real use, a curiosity or a toy will answer; or perhaps a better sense in which to put it in this money-getting age, make something which will sell.

BAD FOR DEAD-HEADS.

The railroads are great believers in the interstate commerce law. They are especially with the law when the pass question comes up, and a number of theories have been advanced by prominent railroad officials going to prove that it is the best thing for the country that every passenger shall pay his fare. One of the most forcible arguments advanced lately is this, which has been found hanging in several of the principal ticket offices in this city:

NONE SHALL PASS.

Scriptural.

Thou shalt not pass by me.—[Numbers xx, 18.

Suffered not a man to pass over.—[Judges iii, 28.

The wicked shall no more pass.—[Nahum i, 15.

None shall ever pass.—[Isaiah xxxiv, 10.

This generation shall not pass.—[Mark xiii, 31.

Though they roar yet shall they not pass.—[Jeremiah v, 22.

So he paid the fare thereof and went.—[Jonah i, 3.

Shakespeare.

Thy ways are dangerous to pass.—[Two Gentlemen of Verona.

He shall not pass you.—[Measure for Measure.

I have no power to let her pass.—[Henry VI.

You may not pass, you must return.—[Canito Canus.

My lord, you pass not here.—[Titus Andronicus.

Then thou canst not pass.—[Romeo and Juliet.—*Memphis Avalanche.*

CHILDHOOD'S HAPPY HOURS.

Friday morning some confiding mother sent her darling boy to the grocery of an errand. He was one of those bright boys, who can remember errands, ride a fence, sing all the popular songs and get up a circus at short notice. He got a quantity of white beans and granulated sugar in paper bags and started homeward whistling "Climbing up the Golden Stairs," as he held the bags by the top and swung them in time to the music. On Cliff street, he rested and set the bags down on a wet step, and the paper weakened. When he started, humming the air "Up in a balloon, boys," taking long strides and slapping the bags together in front of him like a pair of cymbals, he never dreamed of the impending catastrophe. He hadn't clashed them together more than three times before the bottoms came out and there was a pile of beans and sugar mixed on the pavement at his feet. He paused a moment in his confusion, and then taking off his hat hurriedly scooped the mixed groceries into it and disappeared, whistling "Nobody knows the trouble I feel, nobody knows," etc. There is every probability that he felt trouble when he reached home with the

goods in his hat. The hand that caresses can wield the leather slipper, and probably it did.—*Norwich Bulletin.*

PLEA FOR PLEASANT WORDS.

Praise your wife, man; for pity's sake give her a little encouragement; it won't hurt her. She don't expect it; it will make her eyes open wider than they have for these last ten years; but it will do her good for all that, and you, too. There are many women to-day thirsting for a word of praise—the language of encouragement. You know that if the floor is clean labor has been performed to make it so. You know that if you can take from your drawer a clean shirt whenever you want it somebody's fingers have toiled. Why don't you come out with a hearty "Why, how pleasant you make things look, wife," or "I am obliged to you for taking so much pains." If you gave one hundred and sixtieth part of the compliments you almost choked them with before they were married; if you would stop the badinage about whom you are going to have when number one is dead (such things wives may laugh at, but they sink deep sometimes), fewer women would seek for other sources of happiness.—*Our Dumb Animals.*

THE \$1,000 sword which the people of Arizona presented to General Miles was not ornamented with gems, save a splendid amethyst at the end of the handle. The scabbard is of solid gold. One side is left for the presentation inscriptions. The other side is engraved with the following scenes: First, the agency of San Carlos on the reservation, the Indians appearing in natural camp life; second scene, companies of cavalry and infantry in pursuit of Indians; third, the fight; fourth, the capture and the Indians marched to Bowie Station, where a train of cars stands in waiting for their reception; and last, Geronimo's head, with hat on, forming the foot of the scabbard. The blade is of Damascus steel, on which is engraved the name of General Nelson A. Miles, with scrollwork. The handle or handgrip is of white shark's skin braided in gold. The guard is of gold and is emblematic of both cavalry and infantry. At the extreme end of the guard, engraved in gold is the head of Natches, the son of Cochise.

A BAR of iron, worth \$5, worked into horse shoes, is worth \$10.50; made into needles, is worth \$355; made into pen-knife blades, is worth \$3,285; made into balance springs of watches, is worth \$250,000.—*Ex.*

Then why on earth does the blacksmith make the bar of iron into horse shoes for a paltry \$10.50 when he can just as well get \$250,000 for it by making it into watch springs? Some folks don't seem to have any sense.—*Western Plowman.*

PHOTO-ENGRAVING.

ILLUSTRATION OF THE HALF-TONE PROCESS.

Cellini, Jr., explains how the jeweler may use it in advertising.

In the August number of this journal, I spoke of a half-tone process by which a relief cut could be produced direct from a strong negative. Accompanying this article is a cut made in this way, representing "The Wynburne," a fine suburban hotel, located half way between Berwyn and Devon, on the main line of the Pennsylvania Railroad.

This process is well adapted for persons who have houses or other buildings to sell, and wish to give purchasers an idea of the property. The details of the process are difficult to manage, and no mere amateur would be able to realize satisfactory results. The effect is produced by intervening a screen between the negative and gelatine surfaces. For the benefit of all persons who would like to have cuts made in this way, I would say, have some local photographer make a strong negative of the building. Send this to the Photo Eng. Co., 67 Park Place, New York, and for about twenty or twenty-five cents per square inch, you will receive a cut of this in half-tone mounted on a block ready for press. But the "big thing" for jewelers in connection with photo-engraving, as it seems to the writer, allusions to which were made in the August KEYSTONE, is the suggestion that those who possess the skill to make comic drawings, should have them photo-engraved. In addition to what was said in that number, I would beg to add that it needs no great skill in drawing anything that will make people laugh, or what is more to the purpose, make them take notice of your advertisement. As a suggestion, I would say no country town or city but what has certain local points that everybody knows could be so used as to attract readers to your advertisement. It may be, for example, an old pump near the market; a powder house in the suburbs; indeed, anything instantly recognized by all is what you want. Sometimes, if the designer has the skill, a full length portrait of some noted local character is a good subject.

But sight of the object in view should never be lost, and you must be sure you work in your advertisement. Perhaps not directly in the cut, but word the advertisement so that the illustration will be pertinent. In such drawings, the human figures, as a rule, are exaggerated caricatures. Still, in some cases, let the reverse be the case. To illustrate, take the suggestion of the town pump and powder-house. Suppose in drawing the pump with its trough, we would do all the realistic work with exactness, making in fact, a nice correct drawing of the pump, and should add a small child just able to toddle, reaching vainly for the heavy iron handle. In this case, we cannot draw the child too pretty and attractive. Now, take the other suggestion of a suburban powder-house. Here, again, make the drawing of the powder-house true to nature, so everybody would recognize it, but let us add, for a comic feature, a little darkey, with a big gun and the motto, "Wish I had de key." Here, you cannot make the darkey too ugly.

Handsome lockets or pendants can be shown of by wearing them on the left of the corsage, attached to a tiny ribbon bow corresponding with the costume.

Novel card-cases are of shell, with a small watch in the centre, and a pencil which serves as the key.

REDEEMING MUTILATED MONEY.

I am often asked whether this or that piece of mutilated money is redeemable. It is safe to say, unless the money's identity is entirely gone, that it is redeemable. In fact, one may say that money in the shape of ashes can be restored. It is a fact that after the Chicago fire, ashes were redeemed. It came about in this way: It is customary in banks to do money up in packages, say of \$10,000 each, and in the big fire of course hundreds and hundreds of these packages were reduced to ashes. But the shape of the packages remained, and wherever the package could be sent on to Washington without crumbling the ashes the money was sure to be replaced. It was done by nimble-fingered women in the Treasury Department whose trained touch and sight are wonderfully acute. It is well known that the ashes of a newspaper if dampened will show traces of the printing. So was it with the bills. These women would moisten the package of apparently useless ashes, and to their experienced eye the number and character of the bill would at once appear as if they had touched it with a magic wand. So thousands and thousands of dollars were redeemed by these patient women. A friend of mine, a country merchant, afraid of banks, placed a large sum of money in

TALKS WITH JEWELERS.

Said a prominent Chestnut street jeweler: "People have the queerest notions about diamonds and other jewels, and some of them give us much trouble. The most general delusion is that diamonds have a standard value just as arbitrarily fixed as that of a double eagle. You will frequently hear people say: 'It is an excellent investment to place your money in fine diamonds, for they are worth just so much a carat, and you can always sell them for just what you paid for them.' My lady buys a handsome brooch for seven hundred dollars, and after wearing it a year or two endeavors to sell it to her jeweler, or perhaps, to his rival. She is offered two hundred dollars for it. She then throws up her hands and lifts up her voice, and protests that she has been swindled. What nonsense it all is! With diamonds as with other merchandise a stone is worth exactly what it will bring. Were it otherwise there could be no profit in diamond dealing. How could I make money in selling double eagles when I would have to pay twenty dollars for them and could not sell them for a penny more? Here is a very fine Indian brilliant upon my finger, I bought it at a forced sale and paid nearly eight hundred dollars for it. I was offered thirteen hundred dollars for it, but I would not sell because I am

value. Here is another case in point. This fine chronometer which I carry cost me \$350. To-day I could not duplicate it for less money, and yet I could not get \$50 for it. It is in as good order as it ever was. But, alas, it is a key-winder and not a stem-winder, and now no one will purchase any but the latter kind. We must run these risks and we must make people pay for them."

"Who creates these changes in fashion?" I asked.

"I will surprise you," said my friend, the jeweler, "when I tell you that you newspaper men do. It is a fallacy to suppose that any man or woman, or any set of men or woman, fix the fashion in jewelry. The changes originate in our trade publications, and the scheme is innocently carried out by the great journals. The trade organs publish certain new designs in jewelry which they claim are the modish things. These they request the newspaper to copy, which the latter generally do. I can show you copies of some of our trade publications containing printed requests to the trade to endeavor to have certain 'fashion changes' copied in daily newspapers. The scheme does't always work, but that is the way in which fashions are made."

"What are the rage now?" I asked.

"Large diamonds, rubies, sapphires and pearls," was the answer. "A fine ruby of the true pigeon's blood color will bring what you can get for it. They have absolutely no fixed price. So it is with a very dark sapphire. It is impossible to fix the value of such goods. In a few years they may not be worth one-half what they will bring now. And now I guess I have told you enough for one day." Hereafter pity the s'rows of a poor jeweler.—*Philadelphia News*.

BEWARE OF THE DYNAMO.

I have a friend at the capital who dearly loves a joke, and he told me with much gusto yesterday an incident which took place in a lower town grocery store. In the basement of the store is the apparatus with which the proprietor generates the electricity for his own store-lighting plant. A laboring man had occasion to go down stairs looking for something when my friend and the engineer were talking about the great drawing power of one part of the magnetized instrument. The laboring man was walking near to this magnet, which is of great power, when suddenly as he moved around, his tin pail was snatched from his hand and drawn by the mysterious element whack up against the iron. With a yell like a Sioux Indian, the frightened man turned, gave one glance at that tin pail hugging the black iron, and broke for the stairs on the dead run.—*St. Paul Pioneer Press*.

THE days of big profits in soap are past. There are two lakes in Nevada that will ultimately become the great laundry centres of the world. These are Mono and Owens Lakes. The waters contain soda, borax and other minerals in solution and all that is necessary in order to wash the dirtiest clothes is to dip them for half a minute in one of these lakes. During a storm the lakes are a sight to see. They fill up with soap-suds to the height of ten or twelve feet. They are the only lakes in the world that really wash their shores.

Mr. M—, a wealthy banker of the Chaussee d'Antin, applied the other day to a money-lender to advance him 50,000 francs on his wife's diamonds, for which he had paid 120,000 francs. "You can take out the jewels and get false stones mounted in their place. I don't wish it to be noticed." "My dear sir, that has been done already," replied the ursurer. "Your wife has had the start of you, for I bought the diamonds from her last year."—*Petit Journal pour Rire*.

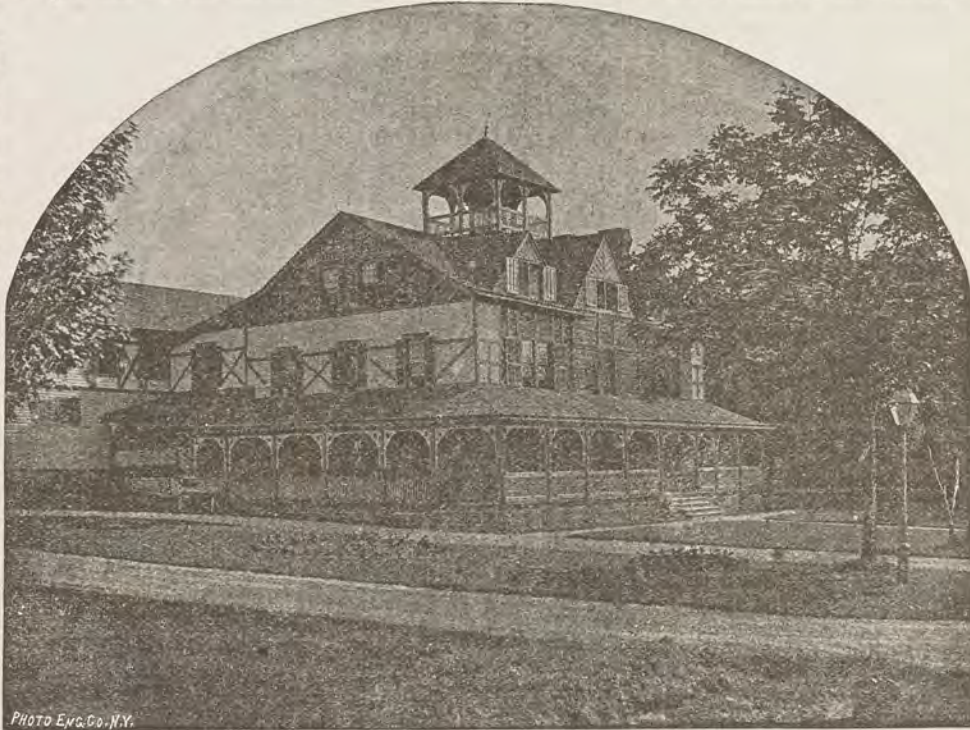


PHOTO ENG. CO., N.Y.

bills in a stone jar on a shelf in his store, where he thought it would be quite safe. When he went to look at it one day some time after, it was a mass of fragments. Mice had got into the jar and chewed the bills into the minutest parts. Then they had mixed them all up, and altogether it was a fearful-looking mess. He sent a cigar-box full of it to me. I forwarded it to Washington, and what do you think? Out of the \$1,145 originally in the pile a little over \$1,000 was redeemed, the parts beyond recall being only the mere fibres of the bills. So the man lost only \$100 by his foolishness. The reclamation of such money is done entirely by women, whose patience especially fits them for the monotonous work.—*St. Louis Globe Democrat*.

THE baby believes in the motto: "A place for everything and everything in its place," and her place for everything is her mouth.—*Somerville Journal*.

TENNYSON is ill with gout. It is apprehended that he caught it from some of his recent poetry, whose lameness is thus accounted for.—*Boston Transcript*.

IN Hindostan a copper cent is called a "damri." From this probably comes the expression: It isn't worth a continental."

in love with the stone. Yet I cannot say that the stone is worth thirteen hundred dollars. It was worth it at the time that sum was offered for it by one who wanted it, but if I were compelled to sell it next week at twenty-four hours' notice, I might not get six hundred dollars for it. "Go on," I said to the jeweler. "I am learning something."

"But it would take me a day to tell you all I would like to," said he, as he drew breath. "Another thing that people never consider is the risk we run through the changes of fashion, the stock we must carry and the length of time we must hold it. Here is a drawer full of coral jewelry. I cannot sell it at any price! Here is a coral set I paid 2,200 francs for. You can have it for ten dollars. Caldwell and Bailey have similiar drawers full. Why? Out of fashion and no one can tell whether it will again become the mode for half a century. Here is a cat's eye—they are all a species of garnet—that cost me 800 francs. It has no price at all upon it now. A few years ago 'melee' diamonds formed in settings were the rage. What do I mean by 'melee'? They are the small brilliants, ranging from one-quarter down to the one-sixty-fourth of a carat. Here is a 'melee' brooch for which three years ago I asked \$720. I can duplicate it now for \$525. But three years ago 'melee' diamonds sold for \$600 and \$700 a carat; now they have very little

THE PRIZE WINNERS.

NINE ENTRIES IN THE COMPETITIVE TRIAL FOR BEST SERIES OF MONOGRAMS.

Twenty Elegant Specimen Designs for the Engraver's Tool, furnished by Members of the Craft, of more than ordinary Artistic Talent.

In this issue of the KEYSTONE appear twenty specimen Monograms, to be followed in October by as many or more, and, if possible, the series will be closed in December. Below are the competitors' names and their entries by number:

H. A. MEHT, 71 Nassau St., New York, 21, 22, 23, 24, 25, 26, 27.
 D. A. WALTERS, 103 Canal St., New Orleans, La, 30, 31, 32, 33.
 H. S. HART, South Bend, Ind., - - - - - 35.
 ED. H. THIELENS, Mattoon, Illinois, - - - - - 37.

J. H. DENT, 615 Market Street, Wilmington, Delaware, 28, 29.
 GEO. BROWN & SON, St. Clairsville, Ohio, - - 34.
 W. H. WHITE, State and Madison Sts., Chicago, - 36.
 G. A. ZIMMERMAN, 20 State St., Rochester, New York, 38.
 H. B. CONYERS, Sault Ste. Marie, Michigan, 39, 40.



THE KEYSTONE

A monthly journal for the jewelry trade, published at Nineteenth and Brown streets, Philadelphia. Price, 25 cents a year, in advance.

THE KEYSTONE has a bona fide circulation of 22,000 copies.

ADVERTISERS say that it is the best medium to reach trade that they ever saw.

THE KEYSTONE reaches every Jeweler in the United States and the Dominion of Canada.

CORRESPONDENCE, and other copy for publication, should reach the KEYSTONE before the first of the month.

TO SECURE a place in the columns of the KEYSTONE, advertisers should forward copy so that it may reach us not later than the 8th of the month.

ADVERTISEMENTS under the heads FOR SALE—HELP WANTED—WANTED and SPECIAL NOTICES are three cents for each word, and no charge less than twenty-five cents.

ADVERTISING rates for column, double column, quarter page, half page, and full page advertisements furnished on application at this office.

Circulation 15,000 larger than that of any other journal of its class, reaching every jeweler in the United States and Canada.

Address all communications to

ROBERT W. ROBINS, Publisher,
Nineteenth and Brown streets,
Philadelphia, Pa.

PHILADELPHIA, SEPTEMBER, 1887.

AMONG the many interesting features of the August KEYSTONE was the astonishing number of new, crisp advertisements, with which its columns fairly bristled. Take page five for instance called the small "ad" page. It contained 468 lines of solid nonpareil; 24 special notices, 45 sale notices, 34 want notices and 13 situations wanted. Is there any other journal in the trade that can make such a showing? An investigation revealed the fact that all the jewelry trade journals combined had but half that amount of special advertising. Advertisers will make a note of this fact there is no doubt, for if any class of men are alive to their best interests, they are the men. And what does this mass of advertising, coming from jewelers all over the country prove, if it does not that the KEYSTONE is the recognized exponent of the retail jewelry trade of America. Manufacturers are fast awaking to the fact that an "ad" in the KEYSTONE pays them a better profit on their investment, than in any other journal, and space in our advertising columns, never goes begging.

Please return to this office every July and August KEYSTONE that you can spare. The favor will be appreciated more than you can know.

WILLIAM H. WELCH, of Demopolis, Ala., hurries in to say: "Please stop the 'ad' 'Alabama.' I secured what I wanted and about fifty applications."

W. H. HUTCHINSON, Oswego, New York, encloses his subscription for what he terms "The best paper on earth for the money. Don't fail to keep it coming."

C. WILLISROFT, Smith's Falls, Ontario, sends in his subscription and remarks: "I missed my August KEYSTONE very much, and began to think my subscription must be due. Please don't fail to send me the KEYSTONE."

COLOROW, the Ute chief who is reported to be on the warpath, is the same one who was responsible for the Meeker massacre in 1879. If his followers are disposed to fight there may be lively times on the Colorado frontier. But there ought to be some way of settling this trouble without the calamity of an Indian war.

RAPALEE'S *Jokinello*, Hartington, Nebraska, fifty cents a year, is a sure cure for melancholia, hysteria, and other kindred ailments. The best physicians use it in their practice with astonishing results. Its fun would cause a cheerful grin to spread over the countenance of a graven image, or send a hermit into fits of laughter.

KING & EISELE are about moving from their present location to the building, No. 198 and 200 Terrace street, where they will have space enough to double their capacity. They will put in a twenty horse-power engine and two large burglar proof safes. They claim they can't manufacture enough goods to supply their trade.

GEORGE L. MEENLY, Tappahannock, Virginia, asks: "What is the matter with the KEYSTONE, or is the fault mine? If my subscription has expired, renew at once, and begin with the August number for I would rather go without my shirt than the KEYSTONE."

[ED.—This was written when it was warm weather.]

Mr. P. SHAW, Olney, Illinois in a recent letter said: "I think my subscription has about run out, and I do not want to miss a number of the KEYSTONE, for it is like the Boss case, the longer it is used, the better it gets. Every copy is worth to me, the full subscription for the year. Suppose you double the price and publish it as much oftener, or make it a dollar a year, and publish it weekly."

OUR monogram pages are meeting a warm reception from the trade everywhere, in spite of the carping criticism of small-fry shoemakers, who are jealous of work which they cannot equal, much less excel. Those who have entered for the race, are requested to send in their designs as fast as possible, so that the question of prizes may be settled as early as can be, after the first of the year.

BUSINESS is booming, with the Julius King Optical Co. In January, the New York office was enlarged and now the Cleveland office has greatly increased its facilities, now occupying, 177, 179 and 181 Superior street. Their line of gold spectacles and eye-glasses and opera-glasses has been largely increased with bottom prices, and quality guaranteed.

WM. ARCHIBALD, of 73 Nassau street, New York, is doing a prosperous trade in supplying dealers with odd stones for jewelry. He carries a large stock of precious stones of every variety and employs a force of men who are kept busy in setting diamonds for the trade. His stock is varied. His prices should tempt the trade of the jeweler, who sends for his catalogue and pricelist.

THE Cleveland *Leader* of August 27th, says: "Having attended the complimentary course of lectures given August 24, 25, 26, by Dr. Julius King, of the Julius King Optical Company, of Cleveland, O., on the theory and practice of fitting eyes, and the correction of the different errors of refraction, we desire to express our sincere thanks and appreciation for the opportunity thus afforded. We feel that the knowledge gained has been of a thoroughly practical nature, and will be of great service to us in our optical business; E. R. Wait, of Wait Bros., Ravenna, O.; H. C. Bostwick, Newark, O.; C. C. Williams, Middleport, O.; W. T. Eisen-schmidt, Newport, Ky.; L. W. Otto, of Rast and Otto, Crawfordsville, Ind.; G. G. Knapp, Lexington, Ky.; C. L. Merry, of Merry & McVetty, Norwalk, O."

S. M. Cooley, of Mayville, Michigan, breaks out in this way: "I just received the July number of the KEYSTONE. I have read it all through. It is a dandy. I take other journals but there is more information in your little paper than in all the others put together."

MR. J. P. DELANY, No. 2, Astor House, has recently applied the "Grip" back to cuff, collar and shirt buttons, also to shirt and chemisette studs. The "grip" is a simple invention, but in its simplicity is its great value. It is merely a small, one-piece immovable attachment on the back of the button. There is no mechanism or bending required in its adjustment, and can be placed in the collar and cuffs without the slightest soil to the linen, which is difficult to do with the old style button. It can also be adjusted quicker and easier than any other button in the market.

CHARLES STIFFT, the leading retail jeweler of Little Rock, Ark., paid the Keystone Watch Case Company's New York office a visit last week. Charley is an ex-traveling man, who settled down some six years ago in Little Rock, and since that time has prospered wonderfully. He is a good illustration of what energy and ability will do in this country, and, especially in that glorious climate of Arkansas. Charley says he is wound up on the Arkansas question, and can talk of the good points of that State by the hour. He has the finest store in the State. One of the secrets of his success is advertising. He says it pays every time.

HERE is a snap for you. Send to this office \$1.25 and you will receive for one year THE KEYSTONE, the Weekly New York *World*, and your choice of one of the following elegant books: "History of the United States;" "History of England," and "Everybody's Guide. Offers like the above are not made every day, and you would do well not to lose much time in consideration, for the chance will not be kept open more than sixty days. The *World's* Weekly edition is without a rival, and is the greatest newspaper success of the century. The three books given as premiums, are dainty volumes of over 300 pages, bound in leatherette, none of which could be bought at retail, for less than \$2. If you wish to take advantage of this extraordinary offer, send at once to the KEYSTONE a postal note for \$1.25, state your intention, name the book you select from the three given, and write plainly and distinctly your name and address. In return, you will receive a receipt for your money, regular issues of the KEYSTONE and *World*, and the premium book will be sent you postage paid.

EIGHTEEN years ago last May, the firm of King & Eisele came into existence in two rooms at No. 283 Main street. They started with two hands, and both of the firm working at the bench. They gradually grew from year to year, crowding the other tenants out of the building, until they now occupy all the available space in building 283 Main and 2, 4, 6 and 8 Swan streets. For the last year, they have contemplated making additional room by adding another story, but as that would only give temporary relief, they changed their plans, and will remove the factory, to 198 and 200 Terrace street, corner of Ann street, where they will make room for 100 hands, besides store-rooms for surplus stock, and will use their present quarters for offices and salesrooms. On the first floor will be the offices, and diamond, watch and jewelry salesrooms. Second floor will have the clock, silverware and material display. The third floor will be used for machinery, salesrooms, and packing. The firm brought success by honest treatment and square dealing, and we wish them continued prosperity.

THE Hutchinson *Democrat*, says: That advertising pays is exemplified in the success which has attended the efforts of Howe Bros., the Hutchinson and Nickerson jewelers. In business but one year, their success has been phenomenal. Their close attention to business coupled with their liberal advertising has made them famous. They are among the best firms in the state.

W. W. WILCOX, editor of the *Jeweler's Journal* of Chicago, during a recent eastern tour, visited the Keystone Watch Case Manufactory, and the office of the KEYSTONE. Mr. Wilcox sizes up well, and gives strong indications of being fond of the good things of this life.

S. F. MEYERS, of the well-known firm of wholesale jewelers, of New York city, was a Quaker city visitor on the 30th of August, and the KEYSTONE acknowledges a pleasant call.

SEE HERE! If this thing keeps up, the KEYSTONE will some day be as thick as the ledger of a wholesale house. So much advertising space has been contracted as to compel an increase to 20 pages in September, and 24 in October. At that number, a halt will be called, at least for this year. Does any one in our audience know of a similar paper for twenty-five cents a year? Guess not! The KEYSTONE is a phenomenal business success, and the best advertising medium in the trade.

THE *Caledonian*, St. Johnsbury, Vermont, says: The firm of Holland & Rowell, book sellers and jewelers, is dissolved. T. M. Howard retires, selling his interest to his partner, A. D. Rowell. Mr. Howard went into business here in 1852 and had probably on his retirement seen the longest service of any man in the place who is still in active business. For eighteen years the sign read T. M. Howard. In 1870 he associated with him A. D. Rowell, since which time the firm has been Howard & Rowell. From the beginning the house has sustained a name for reliability and business integrity which any firm might be proud of. Mr. Rowell, who succeeds to the business, is well known to the people of this town and county, and has all the qualifications necessary for the place. While a host of friends will miss Mr. Howard from the old corner store, they can all give Mr. Rowell a most cordial welcome.

YOU are no doubt kindly disposed toward the KEYSTONE, and would be willing to lend a helping hand to increase its circulation and influence, provided it did not make 'oo large an inroad in your time and patience. Confident that this is so, the following propositions are made:

First offer to your customers the KEYSTONE, and the *Weekly New York World*, both for one year, and their choice of three books, "History of the United States," "History of England," and "Everybody's Guide," all for \$1.25. Get as many such subscribers as possible, and send in their names—their choice of the books, and a postal order covering their subscription at the rate of \$1.15 each. This will allow you ten cents on each name for your time, trouble and postage stamps.

Second, if at any time you wish several hundred circulars to advertise any line of goods you may have to sell, don't put your money in a lot of rubbish that will do you no good, but send your matter to us—we will insert it in the KEYSTONE free—provided it occupies space not more than 2 1/2 by 4 inches, and will charge you just \$3 for every hundred papers we deliver to you. This is cheaper than you can get a circular out, and in a much more attractive form. You can mark your "ad" with blue pencil, and distribute as you wish.

LET THIS CATCH YOUR EYE-



ADVERTISEMENTS.

THE KEYSTONE, is the best advertising medium in the jewelry trade for the following reasons: 1. Because it is as bright as a new dollar. 2. Because it is the cheapest of all the jewelry trade publications. 3. Because it has a larger circulation than any two of the other trade publications. 4. Because its columns are never filled with mouldy old chestnuts, repeated from trade publications that are now out of date.

Notices on this page three cents a word, no advertisement less than twenty-five cents. For number of insertions, liberal discount made.

FOR SALE.

3 YEARS lease and fixtures of the Tryner Jewelry Co., including vault, street clock, tile floor, etc. 1109 and 1111 16th street. The finest fitted up double store in the city, and the choicest location. Cost of fixtures, \$5500. James P. Tryner, Denver, Col.

OR exchange. Improved city and unimproved farm lands for watches, jewelry, etc. Perfect titles. For full particulars, address J. R. Jones, Fort Worth, Tex.

IN a good town of 20,000 in Northern Indiana, situated on 4 Great Trunk Railroads, L. S. M. S. Michigan Central, Grand Trunk, and Vandalia Lines. The best paying jewelry business in the country. Has made \$20,000 in the past ten years, and is as good as ever. Owner going into manufacturing business and has to sell. Stock and fixtures will invoice about \$6000. Want cash and will give 5 per cent. "F. M." this office.

THREE good articles. "Granite Hold-Fast Cement" for jewelers use. Per bottle, 15 cents. "Bartholdi Gold Paint Solution" for covering up hard and soft solder work. Excellent. Per bottle, 15 cents. "The Jeweler's Hard Solder Fluid" for all kinds of hard solder work. First-class. Per bottle, 15 cents. Any jobber or Jno. Y. Betts Jr., 25 John St., New York.

WELL established paying business in next to largest town in Southern California. Finest climate in the world. Business located at the best stand in town. Box 84, Santa Ana, Cal.

ONE J. M. Bottom brass lathe, 10 split chucks, Olin chuck new. Foot-wheel. Also set of small tools for jewelers' use. Cheap for cash. W. L. Tobey, Olex, Oregon.

THE bargain you have been looking for. Will sell my jewelry stock, fixtures and good will. Lock Box 79, Amboy, Ill.

RARE opportunity. New jewelry store opened in May, 1887, doing good business and increasing. Everything new and bright. Stock and fixtures invoice about \$3,500. Store situated on principal business street and best location in a growing manufacturing city in western Penn. Has 1000 inhabitants, and growing fast. Over 200 new houses building at present time. 2 of the mills alone employ over 5000 hands, and work all year round. Store has 2 windows, natural and manufactured gas and electric light. Fixtures consist of 3 six-foot 18 in. deep counter cases, 2 walnut wall-cases, each 9 1/2 ft. long by 9 ft. high, a large safe, and fine plate mirror. The size of glass alone is 60 by 72. Good and satisfactory reasons for selling. For particulars, address "New Store," this office.

A MOSLEY lathe, No. 1 1/2, with complete set chucks that cost \$185, two years ago. In good shape, sell for \$125. T. Voiland, 826, N. Topeka, Kan.

CHEAP. One-story store building in Morris, Minn., 24x30, with safe and other store fixtures, fitted up for jewelry business. Only one other jewelry store in the town. Morris has a fine country surrounding, and is the county seat of Stevens county. Population, 3000. For price and particulars, address D. Elmquist, Litchfield, Minnesota.

SMALL jewelry store, fixtures, show case and work. No bonus. Safe, if wanted. Work and trade enough for one man. Flourishing town. Cheap rent. Box 27, Claremont, Va.

JEWELRY store in nice town in Lancaster county, 2000 inhabitants. Rich, thickly settled country, old established business. 12 passenger trains daily. Only jewelry store. Work for two men repairing. Retiring from business on account of old age. "Watchmaker," box 38, Manheim, Pa.

AURORA Watch Company Stock. Add. A. R. Brattin, wholesale jeweler, N. W. Cor. 7th and Delaware, Kansas City, Mo.

\$2500 WILL buy stock, fixtures and goodwill of a jewelry business, 15 miles from Phila. A good watch repairer can make a good living and clear \$1000 per year. S. J. Garner, Hatboro, Pa.

ONE Grandfather's clock, cast brass eight day works. Moon and calendar attachments, case eight feet high, and very fine. In perfect order. Address C. C. Vittum, Canton, Ill.

WELL established jewelry business in a rapidly growing lakeport, canal and railroad city of 15000 inhabitants in western N. Y. Stock and fixtures about \$4000. In the most prominent place in the city. Gains amount to \$3000 per year. Good reasons for selling. \$1000 cash down and time on balance. Only those with cash and who mean business need apply. "Opportunity," this office.

FOR SALE.

FINE achromatic telescope, object glass, 3 in. Correspondence solicited. W. A. Graber, Sharpsville, Pa.

ONE of the best paying jewelry stores in state of Iowa. The best jewelry store within 200 miles and the only one in the city. Stock and fixtures \$8000, will be reduced to suit purchaser. Those who mean business address "Watchmaker," 61 E. 3d Street, St. Paul, Minn.

JEWELRY store in large and growing manufacturing city in N. J., about 15 miles from New York city, population over 76000, doing fair business. Will sell either stock and fixtures or fixtures separately. Good opportunity for a man with small capital. Reason, poor health. "B. F.," this office.

ON easy terms. Good paying business located in good town in central part of New York state. The business location has been used as jewelry store for past 20 years. Stock in good condition, inventories about \$10000, present value not cost. Large run of repairing. \$2000, the least amount down, and balance to be secured. Time arranged to suit parties making purchase. Object in selling, other business. "A.G.F.," this office.

HANDSOME jewelry store in little city of 6000 population. County seat, on salt water, in rich county. City has gas, electric light, and water works. Growing rapidly. The finest store in seven adjoining counties. Trade direct from three other counties. Stock of watches, diamonds, jewelry, clocks, silverware, spectacles, and eye-glasses. Bisque and bronze goods. With nice fixtures amounts to \$6000. Two plate-glass windows. Store 18x40 feet. Fine location. Stock can be reduced \$1000 run of bench work. Those that have cash and mean business, address Box 307, Easton, Md.

STOCK of jewelry, silverware, optical good and fixtures, invoicing \$6000, in best location, in live town in northern Ohio. 4000 inhabitants, besides 1500 students most of year. Large run of work, one other store. Reason for selling, ill health. Add. "Rare chance," care this office.

\$3000 Jewelry store in southwest Missouri. Town 3500 inhabitants, 3 railroads, roudhouse, end of division, etc. Monthly railroad pay roll \$8000. Rich farming country and good crops every season. Long lease, good location, light competition. Net profits \$1500 per year. Will rent or sell dwelling house. "Haggai," care of Henry Sleek, 1012 Main Street, Kansas City, Missouri.

LEADING jewelry and stationery store in town of 3000. Good room 22x80, leased 3 years. Reason for selling, other business. Stock can be reduced to suit purchaser. Good chance for some one to get a big bargain. New stock and fixtures, 10 old goods. Box 45, Galva, Ill.

LARGE screw press, six horse-power engine eight horse-power boiler all good as new. King & Eisele, Buffalo, N. Y.

\$2500 JEWELRY stock in a live railroad town in southern Indiana. No competition. Exchange all or part for clean stock of groceries. 32 Scotsburgh, Ind.

JEWELRY store in central Wisconsin. Stock and fixtures about \$400. For particulars, address T. J. Jakeman, Westfield, Wis.

OR exchange, Howard regulator. R. L. Deming, Rootstown, Ohio.

SPECIAL NOTICES.

TIME is money. On receipt of 50 cents, I will send instructions how to clean the dirtiest clock movement in five minutes without taking apart, at a cost of one cent. T. B. Stephenson, Canandaigua, N. Y.

EXCELLENT. Wayne Co. Nebraska land to exchange for stock of jewelry. Address C. A. L. Jensen, Ida Grove, Iowa.

A 50-CENT postal note will buy a receipt for making the best dry polish in the world, for gold, silver, nickel, brass, tin, etc. Can be made for 3 cents a box of 2 oz., and sells readily for 25 cents when once introduced. No acid or whitening. After 20 years experience with polishes, I find this the best I ever used. Every jeweler in the world should know it. J. A. Crisp, Jefferson, Ohio.

SEND all your work to Charles Reiss, 31 and 33 South Pearl St., Albany, N. Y. New staffs, pinions, cylinders fitted with dispatch. Stem-winding wheels cut to order. 7 expert watch repairers employed specially for trade work. Send for catalogue. Correspondence solicited. Mention this paper.

"WATCH and Chronometer Jeweling," 100 pp., illustrated, paper 35 cents, cloth 50 cents. "Watchmakers' and Jewelers' Practical Hand Book," 128 pp., illustrated, paper, 35 cents. "Treatise on Repairing Watch Cases," 75 cents. "Jewelers' Practical Receipt Book," over 100 valuable receipts and formulas, 15 cents. Geo. K. Hazlett & Co., 174 Clark St., Chicago.

CHAS. REISS, 31 and 33 S. Pearl St., Albany, N. Y., is the busiest trade repairer in the U. S. Packages with broken watch work coming from all over and promptly attended to by experts under his personal supervision. Special despatch to jewelers at a distance.

\$600 WILL buy fixtures number of tools stock, of clocks and spectacles, all finish work; large Butler safe and good will of well established jewelry store. Reason, ill health of owner. G. Roettger, Petersburg, Va.

A GOLDEN opportunity for you to step into a big paying jewelry business. Engaged in other business. Will sell our jewelry store in town of 3000 population, in Missouri. County seat. Only one other store in the county. Doing a good paying business. Beautiful location. Don't write unless you mean business, and have \$2000 in clean cash. State distinctly what you can do, and when you can do it. Will reply in like manner. Stock is clean and fresh, and will invoice \$3000. Address "Strictly Business," this office.

A "SNAP" for somebody. A chance for some one to step into a good-paying jeweler business in the best city in the state of Iowa. Population now 30,000, and growing rapidly. Best location in the city. Business well established. Bench work runs from one hundred to one hundred and fifty dollars per month. Will reduce to \$2,000 cash. Reason for selling, failing health. Don't wait 'till some one gets in a head of you, but write at once to "Lock Box" 1169, Waterloo, Iowa.

WILL trade for American watches, an upright J. & C. Fischer piano, style "J." 2 years use. Good order. Also for same, a rosewood cased Swiss regulator in perfect order with Gridiron pendulum. "Jeweler," this office.

A VERY skillful workman will take a limited number of pupils to give practical instructions in watch repairing, including turning, springing and adjusting, to which can be added lessons in engraving, diamond setting, etc., etc. For particulars, add. "Horologica School," this office.

SPECIAL NOTICES.

ENTIRELY new shell jewelry. Sample pin for 25 cents. Shell Jewelry Co., Forreston, Ill.

SEND your over-work or difficult jobs in Jewelry repairing to W. S. L. Frear, mfg. jeweler, 55 Cayuga street, Union Springs, New York.

HOW to prevent breaking mainsprings, especially while under warrant is important to every jeweler in the land. Send stamp for circular to J. Harding, Effingham, Ill.

FIRST-CLASS Lathes at low prices. Circulats free. F. H. Jackson, Angelica, N. Y.

THE public to know that J. J. McClellan, jeweler, Bridgeport, O., manufactures all kinds of rubber stamps to order.

THEO. GRIBI, formerly of Wilmington, Del., desires to say to his many friends and acquaintances in the trade and out of it, that he has organized a repair shop for fine watch and chronometer repairing at No. 79 Monroe St., Chicago, Ill. Had thirty years experience at the bench, the last ten of which has been spent as foreman of the adjusting department in one of the largest factories in this country, an outfit of tools seldom owned by an individual workman, together with every modern scientific appliance that can be marshalled into service enables him to confidently expect to win the patronage of all his old customers and many new ones. Inquiries promptly answered. All work done promptly, and under his personal supervision. Special attention paid to adjusting to heat, cold and positions, as well as all kinds of new and difficult work. Prices moderate. Try him.

FOR \$1 will mail to any address, nine printed receipts or practical working formulas. The result of years of careful study. Some of them bought at much greater cost than I ask for the lot. No jeweler should be without them. Every one guaranteed to prove O. K. See the list: To make 18 K gold solder, very easy flowing; to make 14 K gold solder, very easy flowing; To make silver solder; to make white silver solder. For filigree work etc.; to make common soft solder; to make very soft solder for Britannia, pewter, etc.; to make a soldering fluid that won't rust steel; to make liquid glue always ready for clock cases, etc. etc.; A lasting gold solution without a battery, excele it; To effectually clean a dirty clock without taking it to pieces. (Guaranteed to clean the greatest clock in five minutes). D. C. Beckham, Opelika, Ala.

WANTED.

MAN to repair clocks and jewelry. Steady work to right man. Would rather have one who has had a great deal of experience. "Clockmaker," this office.

WATCHMAKERS all over the United States to send their difficult watch jobs to Chas. Reiss, 31 & 33 S. Pearl St., Albany, N. Y., pronounced by leading jewelers the most reliable and cheapest place in the country.

ALL who need special tools or machinery and fine model work, address Geo. F. Haven, mechanical expert, 211 and 213 Mulberry St., Newark, N. J.

THE Public to know that J. J. McClellan, jeweler, Bridgeport, O., manufactures all kinds of rubber stamps to order.

POSITION by a jewelry manufacturer and repairer. 17 years exp. at bench, best of ref. "L." this office.

A PRACTICAL watchmaker of temperate habits by about Oct. 1st. Wages \$40 per month. Must have good reference. James H. Mason, Box 83, Darlington, S. C.

A SKILLFUL watchmaker immediately. P. G. Southwick, Newbern, Tenn.

A FIRST-CLASS engraver, jewelry and clock repairer. Must be able to do work on watches. Steady employment to the right man. Box 2566, Battle Creek, Mich.

AMERICAN watchmaker's lathe. W. E. Bentley, 14 Winter street, Boston

POSITION by young man of 18 to finish trade. Address J. B. Washburn, Vandalia, Ill.

A SECOND-HAND upright engine and boiler. Must be cheap and in perfect order. 2 or 3 H. P. J. D. Winne, Union Springs, N. Y.

ASSISTANCE EVERY watchmaker to send \$1 for my cannon pinion tightener, and receipt for clearing old watch cases. I have lost my business and want to get on my feet again, so I can pay my debts. J. T. Little, Agt., Arkansas City, Kan.

EVERY jeweler in the U. S. to send for selection package of ready selling novelties. Send business card and ref. W. S. L. Frear, Mfg. Jeweler, 55 Cayuga St., Union Springs, N. Y.

A GOOD reliable watchmaker can secure a permanent position at a good salary, a short distance from Phila. Apply at this office.

EVERY jeweler to try Frear's hard solders and flux, liberal samples for 25c. W. S. L. Frear, Union Springs, N. Y.

A YOUNG man to finish trade as watchmaker and jobber at once. Must come well recommended. Box 106, Mt. Sterling, Ills.

ENGRAVER for marking on jewelry, must be A 1 man on inscriptions and monograms. No amateurs need apply. Wm. Freund & Son, Room 10, 125 State Street, Chicago, Ill.

FIRST-CLASS watchmaker and jeweler, who can do ordinary engraving. Permanent position. Box 111 Tusculum, Ala.

EVERY jeweler to look for King & Eisele's Snap advertisement in this paper.

A T once. A good watchmaker, jewelry repairer and engraver to go South. Write or apply to David F. Conover & Co., Cor. Chestnut and 7th Sts., Phila., Pa.

A GOOD watchmaker to take charge of a jewelry store in a bright Kansas town. Address giving terms, and references, "H. L. R.," care this office.

FIRST-CLASS American watchmaker who can adjust marine chronometers, to buy whole or half interest or take a position in jewelry store in San Francisco, established 21 years. Stock \$4500. Profits \$300 per mo. Can be increased. Senior partner retiring from business. Add. with ref. "D.," this office.

AGENTS. Everybody should buy one. Large profits. We have just issued a neat medal, size 1 1/2 (1 1/2 inches), made of bronze and plated with gold to commemorate the celebration of the adoption of the Federal constitution. Samples and terms to agents sent by mail on receipt of 10 cents. Ling & Bro., 1002 Market St., Phil

Keystone Watch Case Co.

PHILADELPHIA. NEW YORK. CHICAGO.

Makers of HIGH-GRADE WATCH CASES.

Keystone Solid Gold James Boss Filled Brands: Keystone Solid Silver Leader Silver Silveroid

SITUATIONS WANTED.

BY young man, age 20. Several years at trade. Box 209, Eureka, Ill.

BY young man 8 years experience as salesman and watchmaker. Best reference. Address "Jeweler," 86 Ash street, Syracuse, N. Y.

IN wholesale jewelry business by young man, age 19 years. 3 years experience. Willing to do anything with chance for promotion. "R. F. G.," 18 S. Detroit street, Xenia, O.

AS watchmaker and jeweler. 20 years at the bench. Have good set of tools, Mosely lathe and portable bench. Can take charge of store. Best of reference. "Jeweler," box 991, Franklin, Venango Co., Pa.

BY a watchmaker and jeweler of 16 years experience. Can do all kinds work. Can come by the 15th of October. Have my tools and lathe. W. S. Yoder, Sigourney, Iowa.

IN a store. Can do general jobbing, watch and clock repairing. "W. H. S."

MAINSPRINGS.

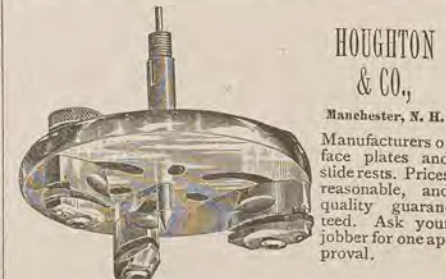
If you wish a reliable mainspring, address INTERNATIONAL JEWELRY COMPANY, 12 Maiden Lane, New York.

A. R. BRATTIN, Wholesale Jeweler, Watchmakers Tools and Material, and Jewelers Supplies a Specialty. N. W. Cor. Seventh and Delaware, KANSAS CITY, MO.

Superior Quality MUSIC BOXES H. Gautschi & Sons, Manufacturers, 1030 Chestnut St., Philadelphia. We make a specialty of repairing old and damaged Music Boxes. Established 1824. Send stamp for catalogue.

Jas. B. Baker, Successor to Rem. P. Davis & Co., 1205 Chestnut St. Philadelphia, Pa. Manufacturing and Repairing a Specialty.

CHAS. REISS, 31 and 33 S. Pearl St., Albany, N. Y. Jobber in American Watches of every description. TOOLS AND MATERIALS. Sells only to the jewelry trade.



HOUGHTON & CO., Manchester, N. H. Manufacturers of face plates and slide rests. Prices reasonable, and quality guaranteed. Ask your jobber for one approval.

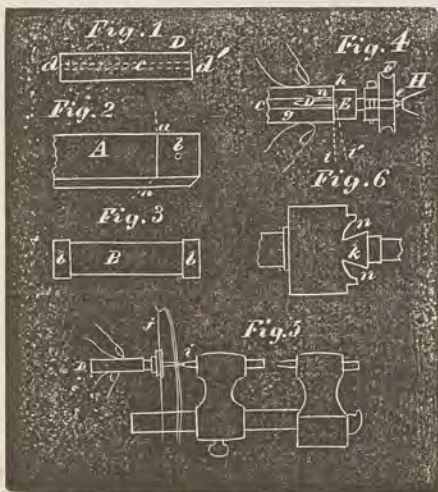
Old Liberty Bell. A perfect metallic mode in miniature of the "Old Liberty Bell," that did "Proclaim liberty throughout the land unto all the inhabitants thereof," at the signing of the Declaration of Independence, July 4th, 1776. By mail, 25 cents. WILLIAM B. HAMM, 814 South Fifth Street, Philadelphia.

THE BOW LATHE.

A PRACTICAL TREATISE BY OUR WATCHMAKER.

Sixth of a series of interesting letters on the management of this tool so useful to the trade.

The bell metal tools for facing off the leaves of pinions, mentioned in August KEYSTONE, can be made of square strips of this metal, to be obtained of any material dealer. The largest size for facing centre pinions should be about three-sixteenths square, so as to face off at the end and leave surface enough to cover (and a little to spare) the entire face of the pinion. In case square pieces can not be obtained as large as three-sixteenths, there are plenty of flat bell metal slips one-fourth wide by one-eighth thick, and a small square bit can be cut from such a wide slip as shown at Fig. 2, where *A* represents the slip of bell metal, and *a* where it is cut off. At Fig. 3, is shown a piece of large brass bushing wire, *B* with two such pieces (*b b*) soldered on, one at each end. These pieces can be drilled and turned to conform in shape to the simple bell metal pinion facing device shown in longitudinal section at *D*, Fig. 1. The ends at *d d* can be turned; but this is not absolutely essential, but it is imperative that the ends should be perfectly flat and very near at right angles to the hole *c*, Fig. 1. As stated in the August



KEYSTONE, by broaching out the hole *c*, with a taper broach, the holes in the two facers *d d*, will vary slightly, and by having five pieces like *D*, we of course have ten sizes of holes. There need not be much difference in the sizes of *D*, except the large ones for centre pinions. All the facers made from the one-eighth square bell metal slip, can be left as large as will turn up. For it is just as well to turn up and fit into good shape the pieces *D*, as to leave them rough and unsightly. There should be two sets of five of *D*. One set for grinding, using oil stone dust and oil, and the others for polishing, using diamantine and alcohol. At Fig. 4, is shown a longitudinal section of a pinion *E* and polisher *D* in position for using. It is usual for finishing pinion faces, to do it before the entire turning is finished, as for instance, in Fig. 4, the ends of the pinion *e g*, the pivots are only roughed out. In using the polisher, it is taken between the thumb and finger of the left hand and applied to the pinion as shown in Fig. 4. It may be well to say a screw collet *F* is put on the pinion, as shown in Fig. 4. The method of using is fully shown in Fig. 5, which needs no explanation. It seems well to here explain the principle on which the facer *D* operates. In Fig. 4, which is a magnified illustration, it will be seen that the bell metal facer *D* and the pinion *E* come together on the line *t*, and consequently have a tendency to keep the pinion and facer on the common line of centers *c c*, as any tendency to rock must be on the outer edge of the pinion at *N*. On trial it will be found if the pinion *E* is faced off

flat, or a very little concave where *D* is applied, as shown in Fig. 5, that although the pinion may be swung about at *i* a good bit, that the faces of the pinion and polisher will lie steadily together. The bow *j* is given a steady up and down motion, and the pinion taken away frequently to add oil and oil-stone dust, and also see when the grinding is complete. Not enough pressure should be applied to *D* that the pinion will cut it, but just enough so the oil-stone will grind well. This caution is especially to be observed in commencing. After the pinion face is flattened, it should be thrown in benzine to remove all the oil and most of the grit. The only thing which will remove every vestige of the grit is bread crumbs worked into a mass. Rye bread is the best; but a bread made from spring wheat does well. I speak of this more than some readers may think is necessary; but as bread crumb used as described is absolutely the only substance which answers the purpose perfectly, I beg to be indulged, as the least particle of grit adhering to either the pinion or polisher will spoil a perfect polish, not only for the present job, but render the polisher unfit for subsequent work until the offending grit is removed by fling off the face of *D*. After the cleaning is done, a clean bell metal piece *D* is used with diamantine and alcohol. The most perfect and lasting polish is obtained by steel rouge moistened with oil and used with the bell metal polisher, but it is very slow, and few persons who have not been drilled and declined by a severe and exacting "boss" will ever learn to polish properly with rouge. To recapitulate in doing a good job of pinion facing, first make true, and exact turning of the face, turning the face a little, say .001 hollowing so as to guard against rocking between the pinion and *D*; second, remove all grit left by the oil-stone dust as above directed before polishing. After the pinion is faced on both ends, the staff part *n* is finished and polished. This is done with a flat bell metal slip, letting the points *e g* run in the lathe centres the same as in turning. Here again is required good smooth turning, as five minutes with a sharp graver well directed will economize 300 per cent. in time spent with a bell metal slip and oil-stone dust. A file no matter how fine, is not necessary if the graver has been skilfully used, as the bell metal slip, with oil-stone dust, almost instantly removes every graver mark. Cleaning with bread crumbs must be resumed before polishing with a clean bell metal slip, and diamantine and alcohol or a piece of flattened peg-wood with the diamantine and alcohol. The finest and most beautiful pinions we see are in the English marine chronometers and high grade watches, and are all rouge polished by men especially drilled to this kind of work, and it is hardly to be expected that men who devote their time and attention to the mere repair of watches will ever bring themselves up to the point of equaling the skill of a specialist, particularly when the perfection is only for show-looks. A good, fair, bright, "white" polish is a case where "good enough" is perfectly admissible. Undercutting is something which displays the skill of the finisher on the bow lathe. This, and the flat finish of pinion leaves just described, are things hard to equal with any live spindle lathe. And we certainly must admit that as far as elegance and perfection of finish is concerned these are the acme. I will first describe what I mean by finish in undercutting and leave the method of doing it to our next. At Fig. 6, is shown a magnified longitudinal section of an English chronometer pinion. What is meant by undercut is the concave recess shown at *n n*. This recess is as perfect in shape as if cupped out with a ball, and the cone *k* inserted; and at the same time of a mirror polish. How to do this will be considered in the October KEYSTONE.

THE ITALIAN QUEEN'S FAVORITE NECKLACE.

Queen Margherita of Italy possesses a coral necklace which she always wears day and night. If the Queen wears a dress with which the ornament does not harmonize, she keeps her necklace on, although hidden. The following story is told in connection with the necklace: Five years ago the Italian Crown Prince, Victor Emmanuel was out walking in Venice with his tutor. He noticed some corals in a jeweler's window which pleased him very much. "I shall buy those for my mother," he said, and so saying entered the shop to ask the price of the corals. On hearing the sum he said: "I have not so much money at present, but I will make you an offer. I will buy five corals to-day and you keep the rest for me and as often as I have saved some money I will send it to you and you will send to me as many of the remaining corals as the money will buy." The bargain was concluded, but two years elapsed before the Prince had the pleasure of presenting his mother with the necklace. The Queen, on hearing the circumstances of the purchase, was very much affected and said to her son: "This is now the most precious of all my jewels and I will never cease to wear it, for it will always remind me of your tender love for me."—*New York Tribune*.

MARK HOPKIN'S LAVISH EXPENDITURE.

Adjoining the Stanford mansion in San Francisco is the striking Norman castle of Mrs. Mark Hopkins. Her husband was the financier of the railroad company but he wore himself out by constant application, and for several months before his death he had forgotten his own identity. Just before the loss of his memory he had begun the construction of this superb residence. One day, his medical attendant took him to the top of the hill, where he saw the work of building going on, when the millionaire turned to him and in a querulous tone asked: "What infernal fool is wasting money on such a house as that?" He died soon after. His widow, who was a poor New England girl when Mr. Hopkins married her, inherited all his wealth. She still retains her shares in the road, and her adopted son is one of the rising young men in the railroad office. Her country home is at Great Barrington, Mass., where she has built a costly summer residence. She is regarded as the richest woman in America, as she has a fortune of at least forty million dollars, of which she does not spend one-half the income.—*The Cosmopolitan*.

HONESTY RICHLY REWARDED.

"I think I've found the most generous woman in New York," said a Maiden Lane diamond merchant to a friend in the Astor House rotunda yesterday. "Proceed with you story," replied the other, resting his elbow on the polished bar. "Ted, my little office boy," the merchant continued, "found a lady's pocket-book the other day. It contained about \$100 in cash and several valuable papers—valuable to the owner, I mean. He picked it up near the door of my store, but as no one saw him do it he could easily have kept the money without any one being aware of the fact. It must have been quite a temptation to the little chap, for he only earns \$2.50 a week and his folks are very poor. But he brought it right in to me like a little man. I watched the papers but it was not advertised. Several days passed and I had begun to think of giving the book back to the finder when I learned from a friend that a wealthy lady customer of mine who lives in Fifth Avenue had suffered a loss of this kind. I sent Ted up with the

purse. Sure enough, it was hers. When he had explained how he found it she became demonstrative over the honest way he had acted. She patted his head and declared that it did her good to know that there really was one honest boy in New York. 'You'll not go unrewarded either,' she added. 'Just come with me.' He went with her into an adjoining room and then what do you suppose she gave him as a reward?"

"Oh, \$10, perhaps," returned the friend.

The diamond man smiled. "The reward she gave him," he added, "was a big piece of huckleberry pie—simply that and nothing more."—*N. Y. Tribune*.

A CHURCH sociable and hugging bee at Elk Creek, Neb., broke up in a row recently. A withered remnant of a man, aching for a smack at sweet sixteen or thereabouts, blew in fifteen cents and was blindfolded. The managers ran his wife against him and the squeeze he gave her made her back ache. When the bandage was removed and he discovered the swindle he howled like a wild man, smote the manager on the jaw and choked the treasurer till he refunded.—*Omaha Bee*

HONESTY is more precious than gold, although it cannot equal gold in opening the way into a fashionable city church.—*Whitehall Times*.

EXIT the car stove from the railroads of New York State, May 1, 1888. The bill decreeing that they must "go" has been signed by the Governor.

NOVELTIES.

A most attractive necklace is a barrel-link chain with a dozen one-eighth carat diamonds hanging from the centre, in claw settings.

A pretty pendant now in the market consists of a three-leaf clover in the centre of a crescent formed of miniature clover leaves.

Manufacturers of diamond mountings are busy on combination pendants, lace pins and hairpins, designed for both diamond and colored stones.

Colored flower brooches for bonnet-strings, fichus, etc., are beautifully enameled according to nature. Pale violets are greatly sought after, with a diamond dewdrop in the centre.

Antique-looking silver medallions are connected by chains for belts, and have one end hanging for the fan, smelling bottle, etc.

The diamond heart, once popular with our grandmothers, is again well received by the belles of to-day, who wear it interchangeably as pin or pendant.

A gold collar of open braid work is among the articles necessary to complete the toilet of an ultra-fashionable lady. Bracelets of the same pattern are attractive.

A very attractive pattern for a ladies' watch is a nugget surface set with diamonds, the effect produced being that of the stones as found in their natural beds.

That queen chains are going out of fashion is denied by the manufacturers, who state they are great demand and that new styles are being prepared for the fall season.

The tiger eye is a stone much used in men's jewelry. An owl carved from this stone is a favorite watch charm.

The old fashion of wearing a bunch of watch charms, instead of a single locket or seal, on the watch chain is coming in favor again.

A diamond spider centered in a web of gold and in the position of drawing into his den a fly of emeralds, with which it is connected by a gold chain about three or four inches in length, is an attractive ornament for the hair.



THESE are a few specimens of the immense line of engravings on BOSS cases that are being put out for the Fall trade.

Keystone Watch Case Co.,
Philadelphia, Pa.



OUR WORKSHOP.

WALK IN AND MAKE YOURSELVES AT HOME.

The most puzzling problems clearly and fully described for the benefit of fellow craftsmen.

A subscriber wishes to know what will prevent perspiration on the hands? It is very difficult to stop the hands perspiring. It is very difficult to stop the hands perspiring. Washing with astringent substances only checks it for a short time. The only sure way is to guard against the effects, and learn to use paper to handle everything which will stain or rust. Some of the manilla papers are good. Many workman use the best quality of toilet paper. It is strong and free from fine lint fibre, which most all tissue papers throw off when brushed. Some workman wash their hands in a weak solution of gallic acid; others say alum water. but as stated above, it is doubtful if anything will do much good for more than a few minutes, and just simple soap and water will do this.

JAMES C. LECLAF, Silver Cliff, Col., says: "I have a little 'kink' in regard to case screws. I remove the case screws and round off the cutting edges on the lower side, and thus save the case from being cut, and the hold for the screw-head destroyed. A good 'kink,' Mr. L., send us some more."

A. THURSTON, St. Paul, Mo., asks: "Will you tell me how to soft solder (sand) cast iron?" Cast iron does not "tin" or coat with soft solder readily. It takes zinc more readily. If zinced first, it can be tinned or coated with soft solder. What you mean by "sand" as used above is a little indefinite. It is presumed you mean cast iron, as it comes from the sand. Such casting should be pickled by brushing with a mixture of sulphuric acid and water; one part acid, six of water. In about twenty-four or thirty hours the scale of burnt sand will slough off, when they should be thoroughly washed and dipped in soldering fluid, made by dissolving zinc in muriatic acid all it will take. The iron will now receive soft solder to some extent. But the best way is to zinc the casting.

A "SUBSCRIBER" wishes to know: 1. How to get dirt out of engraving on watch cases? 2. How to clean nickel-plated show cases? 3. Is your book on "Engraving and Pivoting" for sale, and price? 4. Please give me a plan for making a revolving graver holder for gravers when not in use? 5. The address of several firms dealing in engraver's tools, letter books etc?

1st. A good mixture for this purpose, especially silver cases, is composed of whitening one oz.; strong liquid ammonia, one oz.; alcohol; two oz.; water three oz. This mixture, well shaken before using, (to keep the whitening from settling) apply with a worn watch brush, will clean the engraving and remove the stain from around the joints.

2nd. Vienna lime shaved with a knife to a fine powder, and run through a fine sieve, one made of Swiss muslin. The sifting is to remove coarse particles which would scratch. Such fine lime mixed with cosmoline, or benzine thickened with paraffine, makes a mixture which produces a splendid polish on nickel goods with great rapidity.

3d. The book on "Engraving and Pivoting" is only for subscribers. Send twenty-five cents with name and address, and you will have the book and the KEYSTONE for one year.

4th. You will find your answer with accompanying cut in another part of the KEYSTONE.

5th. F. Weber & Co., 1125 Chestnut

THE MARCH OF THE NATIONS.

By J. L. S.



There is a great and grand procession, that is marching round the earth, Of men from every nation, and of high and lowly birth. The reason for this marching, no doubt you would like to know, And why the men of all creation are marching to and fro. So, if you will give me your attention, to tell you I will try, Of the legions upon legions as they go proudly marching by.

In command of this procession, with proud and stately tread, With a Boss case in his pocket, Uncle Sam is at the head; Then the negro with his razor, says, as he marches with the rest: "I's jess gwine to carve de man what says de Boss am not de best." Here is our fighting friend from Ireland, who says, as he gives his shillaly a toss: "Be jabbers I'll thump any mon who says a word forninst the Boss."

Our stubborn friend the Englishman, who has been a trifle slow, Now wears the Boss, and says: "they are a blooming thing, you know." Here's the shrewd and thrifty German, who says as he drinks his beer and wine: "Wer nicht liebt das schoene Boss ist ein Dickkopf und ein Schwein." And the washée man from China, says, as he joins the marching clan: "Me wearee Bosse casse, alle samee Melican man."

Here's the man from sunny Italy, with his organ and his monkey, Says: "buy the Bosse casee if you no want to gette stuckee." The gay and witty Frenchmen, too, have learned how good they are, And says: "if you want ze best, why buy ze Boss by gar." And the brave and gallant Spaniards say, as they give their hats a toss, "Jamás compraremos sino el Jaime Boss."

The shrewd and prudent Scotchman says, with his love of pound and pence, "Why mon alive, buy the Boss case and show your ain good sense." The Russians and the Prussians, too, have joined the mighty throng, And with the Austrians and Hungarians are marching right along. The liberty-loving Swiss, too, have joined the glorious cause, And of the merits of the Boss case, are the loudest in applause.

And the Japanese and Portuguese have joined the happy crowd, And with a Boss case in their pockets, feel very brave and proud. Here is the dirty man from Turkey, too, marching hand-in-hand With the men from Norway and Sweden and India's golden strand. And the Anarchists and Socialists, too, are marching with the clan Together with the Mugwumps and Barnum's hairy man.

The brave and fiery Arabs with the heathen from the Nile, With the New York dudes and dandies are marching on in style; While the Persians and the Hottentots are scrambling for a place, With the grand, old battle cry of "buy the James Boss patent case." Here comes a brave and loyal host from South America's sunny shore, That the makers of snide cases can cheat again no more.

These men with the large sombreros are from the land of Mexico, And to snide cases and their makers are an unrelenting foe. Here's the loyal men from Canada, who love their fish and Queen, But say the Boss case is the finest one, that they have ever seen. And so this grand procession goes on from year to year, Leaving snide cases and their makers a long way in the rear.

So join this grand procession and march with all mankind, Leaving your snide cases to those who walk behind. And be assured when you are marching, and rejoicing with the rest, With a Boss case in your pocket, that you have got the best.

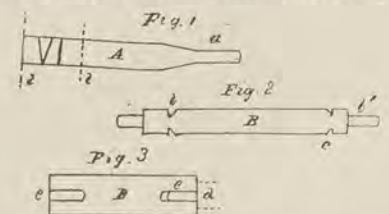
street, Philadelphia; Tallman & McFadden, 1025 Market street, Philadelphia, Pa.

A. M. OLNEY, Wyoming, R. I., says: "Since writing the little article on 'soldering with the use of borax glass,' I have been asked how I prepare it. Many cannot get it and others don't know how to make it. This communication I hope will make many happy. I proceed as follows: Take a piece of borax, put it on a piece of charcoal, and melt it down with a blow-pipe and alcohol flame, and there will be left a small, glass bead. Take this and crush it with a smooth clean piece of steel into fine grains, put these in a box for use. To solder with them—clean the two surfaces to be joined with hard solder, apply a little water in which borax has been dissolved. Upon the line of juncture place a small grain of hard, silver solder and on or beside this solder, put as large a grain of borax glass, or one on each side of the solder, and then carefully apply the alcohol flame with a blow-pipe. In soldering, wire and fasten the work upon a piece of good, hard maple, or birch charcoal. Let joy come unto you. Keep the KEYSTONE coming to me.

A CHAPTER ON SCREWS.

A notice was given in the July number of the Keystone, of further considering the subject of making and finishing screws. Our Watchmaker in his essay on the "Bow Lathe" advises that apprentices learning to turn, shall produce something useful. This idea is quite as applicable to the pupil learning on an American lathe. Let him learn to turn and fit his own screws, and it is much more quickly done than on a bow lathe. It is not necessary to keep a large assortment of steel wire, two or three sizes are enough; as all the heads will have to be turned to fit the sinkss, especially, for Swiss watches. In all kinds of work, system is of the greatest importance. For a person unused to such work, this would be quite a job, but to a thoroughbred, a very few minutes would be sufficient. Making screws applies particularly to Swiss watches, and in the end saves time.

One feels better when backed up by the satisfaction of knowing he has done a good job. For making screws we should have about three sizes of wire, measuring about .06085, and .115 of an inch in diameter, the latter measurement for American balance-bridge screws, the other sizes for Swiss. All watchmakers should have micrometer callipus measuring to 1-1,000 of an inch, and in turning for a screw, turn to a definite size. The best way is to get a standard Swiss plate, ranging from 0. to 20, such a plate can be bought of any tool and material house. The next thing is to prepare a set of taps which exactly match the plate; these are best made of wire larger a good deal than, would fit the hole as shown. At Fig. 1,



where A shows the full size of the wire and a the size to be turned to fit any given hole in your plate. The part of the wire between the dotted lines l, l, should be flattened by removing nearly half, so as mark on the number of the hole in your plate to which the tap belongs. In turning for a tap, the part at a should be turned as large as will run in the plate; in fact, the idea is to make the thread as full and perfect as possible, while in turn for a screw to be used to follow such a tap it can be allowed to run a thousandth or a thousandth and one half less; as for illustration, if we were turning a to make a

tap for a No. 6 hole in a Swiss screw, we should turn the tap *a* about 46-1000, but we would turn the screw *b* to follow it 44 or 44½ one thousandths. In cutting a screw, a burr is raised, which to all appearances is a full thread but it will run quite easy in the hole tapped out by *a*. True, it is in fact, not a full and perfect thread, but after the screw is hardened, it will hold for all practical purposes. In making out a memorandum card for reference, we should record first the number of the hole in the screw plate then the size to which a tap should be turned, as well as the screw to follow, as below:

We should have about three sizes of wire for screws, and turn the blank to match your plate, leaving the head to be turned to suit the sink in the bridge, by the tool shown in Fig. 3. Of four-fifths of the Swiss watches one will be called upon to repair, it will be found that the size of tap to use will run from 7 to 10, the two inclusive making in fact, but four sizes of screws. In making the blanks for stock screws, about three sizes of steel wire will be required, 115, 85 and 60 thousandths of an inch in diameter. Take pieces of wire of the sizes mentioned above, and turn blanks on them of the sizes mentioned above, and turn blanks on them of the size desired, and shaped as shown at *b b*. After the screws are cut, the groove at *c* is turned, but the head is left. We now provide three pieces of hard brass wire, a little larger than any of the wires we use for making screws, and about three-fourths of an inch long. These are centered, drilled, and tapped at each end to receive the screw blanks, these blanks are run in up to the head, as shown at the dotted outline at *d*, and turned to fit any sink in which they are to go; then slotted, and hardened and finally, finished and polished. One fact should be kept in mind, and this is that in hardening, a scale is formed on the steel, which will not blue well. To remedy this, use your washita stone slip on the head after hardening enough to be sure you have all the scale ground off. Then carefully remove all grit with pith, or better, a crumb of bread, and polish with diamantine and alcohol on a slip of boxwood. Such pieces as shown at *D*, Fig. 3, tapped to fit all the sizes of screws you make, and slipped into a split chuck hold a screw without marring the thread, while turning and finishing. In fitting a new screw, the old hole in the plate should be tapped out with one of your new taps, to ensure the perfect fitting of the new screw. If the above details are carried out, and all the parts required kept so that you can put your hand instantly on the different special tools required, a screw can be fitted quicker than you could select one, which would at the best only half fit. Screws with perfectly flat polished heads are finished and polished in the manner known as "flat steel work," a subject to be considered in our next issue.

A DEMORALIZED CLOCK.

Two well-known club men, who had been celebrating the results of a "straight" tip on the races, walked in an uncertain manner up Fifth Avenue yesterday afternoon, and when they came in front of the Fifth Avenue hotel the elder from habit pulled out a handsome gold watch to compare his time with that of the clock in front of the hotel. When he looked at the innocent time-piece that looks down upon thousands of people daily, his watch dropped from his hand and dangled at the chain's length, his eyes opened wide and stared wildly and he almost fell into the arms of his friend.

"Good Heavens!" he gasped. "I've got 'em sure. I'll swear off on the spot."

"What's the matter?" said his companion.

"Why look at the clock!" They both stood and stared at it and the younger

TRENTON WATCH.

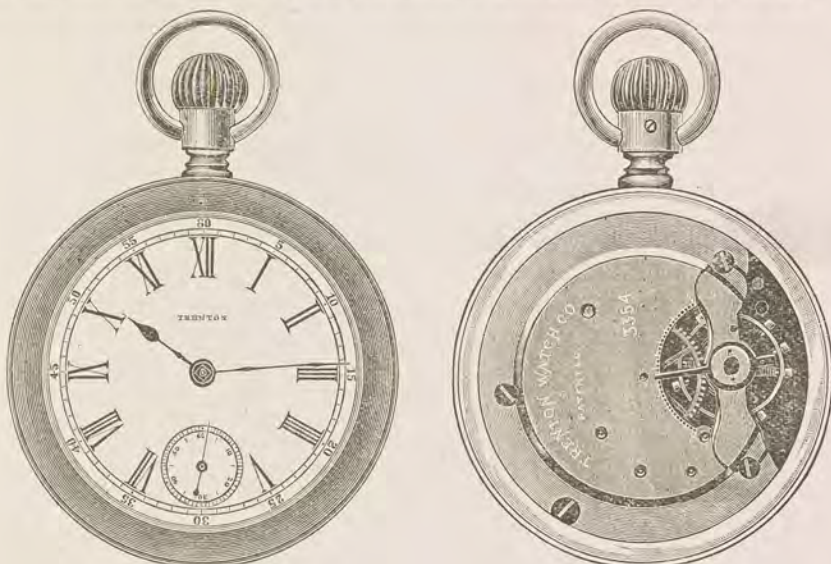
Something New.

TO THE TRADE.

To supply the demand for a good cheap watch, we have made

"THE TRENTON."

It is an accurate time keeper, a straight-line lever escapement, with second hand; jeweled; 18-size; stem-wind and stem-set. Quick train. We confidently claim that it is the best watch for the money yet produced. We invite inspection, and put the watch upon its merits. We sell them in Diamond Silver Case; Snap-Back and Bezel; also a Gold Filled, 14-k with Hinges and Cap; Engine Turned and Warranted. These Watches are for sale direct from the Factory, and will be sold to the legitimate jewelry trade only.



For Prices and Discounts, Address

TRENTON WATCH COMPANY,
TRENTON, N. Y.



A GRIP WORTH KNOWING.

By referring to the cut in this column you will see how an ingenious contrivance, patented by Mr. J. P. Delany, of No. 2 Astor House, holds down the rebellious necktie. This collar-button grips the necktie and holds it in a clutch from which there is no escape. The invention is very appropriately called the "Grip."

OSCOOD FOLDING CANVAS BOAT



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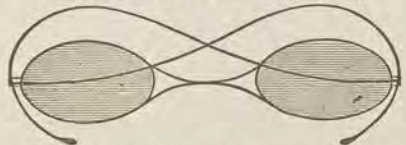
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Ml. Concave, - - -	1.75
Patent, - - -	3.00
Thick Flat and Thin, - - -	4.00

Send your orders at once, while the assortments are complete, as we will not duplicate these goods.

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man swayed slowly backward and forward with one eye shut and the other firmly fixed on the cause of the excitement. The hands seemed to have started off on a sort of go-as-you-please contest for the clock championship and they turned around like the wheels of a windmill in a twenty knot breeze.

"That's all right, the old clock has been stopped for a day or two and is just trying to catch up," explained the young man in uncertain tones.

"Is that all! Let's smile!" and they walked into the bar-room to "smile." They were not the only persons who stopped to watch the peculiar antics of the old clock. One after another looked at the hands and waited to see how near his watch would be to the time at which they stopped. But as the hands kept going and time was evidently valuable, not more than forty or fifty people waited with watch in hand until the hands finally settled down to their proper work. The minute hand won the race.—N. Y. Tribune.

"I THINK I've got rather the meanest husband in Detroit," exclaimed a little woman on the car the other day.

Her friend asked her to explain, and she continued:

"I found that he was smoking fifty cents' worth of cigars per day, and I got him to agree to give me as much pin-money per-week as the cigars cost. He stuck to it one week."

"And then what?"

"He bought him a clay pipe and a pound of ten-cent smoking tobacco, and my income is cut down to two cents a week.—Detroit Free Press.

IT WASN'T A BOSS CASE.

A gentleman who lives near Ellijay put his fine watch in his trousers pocket and wended his way to the cotton patch for the purpose of hoeing cotton. Soon after chopping up a few bunches of grass he felt something cold on his leg and thought it was a sand cutter crawling up inside. He at once dropped his hoe and grappled his trousers, pulling them tight to his leg to stop the lizard from crawling, and began beating on it with his fist. After knocking and stamping all the cotton down in a half-acre patch, his wife appeared upon the scene and excitably exclaimed:

"What in the world is the matter, are you sick?"

"No, there is a lizard up my trousers and I j-u-s-t feel him now, biting."

By this time he decided to pull off his raiment to see what it had done, and to his chagrin, he found that his watch had slipped out of his pocket, and fallen the length of the chain down his leg, and he had absolutely broken his watch to pieces, and drove the parts of the crystal into his leg. He is now convalescing.—Savannah News.

POINTERS.

—Brass kettles, once hammered out, are now spun on a lathe.

—A bug with a carbuncle body pierced by a gold pin is a cruel new hair-pin.

—Wearing diamonds in the street is considered somewhat canaille.

—Steel spangles are seen on some new wraps, which they enhance.

—Jeweled pins, made to imitate flowers, are worn almost exclusively as lace pins.

—Jewels should never be wiped dry, but let dry in sawdust.

—White enamel jewelry looks pretty and cool for summer.

—The wearing of a sapphire is said to "repel gout and ague."

—A tiger-eye owl's head with diamond eyes makes a tasty pin.

—The latest dangle in jewelry is a silver box to hold court plaster.

AT CONEY ISLAND.

The Great Summer Resort for all New York—The Denizens of the Bowery and the Millionaire of Wall Street All Go Down to the Island—A Day by the Ocean Waves.

[Special New York Correspondence.]



It has been hot. In no previous summer has the heat been so oppressive and so enervating. The clerk of the weather affirms that this is due to the hermitism of the atmosphere, making a sticky, lifeless heat. I fancy this must be the case for we have fairly revelled in humidity. Where we used to have showers we have had deluges, but the rains have been hot and the thunder-storms, instead of clearing the atmosphere, have only thickened it and rendered it more oppressive.

As a consequence the great middle class, who couldn't leave the city for the summer but who could afford a brief outing, have been patronizing Coney Island. Coney Island is a little world in itself, a replica of the great metropolises in paint and tinsel. From the Bowery dime museums, dance halls and beer gardens at the west end to the Fifth Avenue dignity of the Oriental and Manhattan at the east we have all the gradations of city life. The sausage stands, the merry-go-rounds, the strength-testing machines and all the contrivances for alluring the nimble nickel from the horny-handed son of toil on the one hand, to the swell hotels where any coin less than a dollar is looked upon with scorn by the imperious clerk waiter.

It was a hot day and I went down with my friend, the artist. We boarded one of the iron steam-boats and prepared to enjoy our sail down the bay. The "most magnificent harbor in the world" was glistening in the sunlight, and the rays were reflected as if from a sheet of burnished copper. Liberty looked hot and uncomfortable on her island. The heat haze rose and vibrated like a veil of gossamer over the Staten Island hills. The sails of the pleasure yachts flapped languidly. The motion of the boat made a cool breeze which lulled the senses and made us forget the heat of the city.

"It is getting cooler," murmured the artist as he leaned back on the bench and drank in the fust, salt air. I do not know of a more charming sail than this, down through the narrows to Coney Island. It is certainly the most desirable way of reaching the "city by the sea." But as all good things must come to an end, we found that all too soon the Iron Pier was reached and we had to disembark.

Many people go no further than the Iron Pier. Here is a comfortable restaurant where clams and cooling beverages can be obtained and the ocean rolls just as majestically here for fifty cents as it does from the



LIQUID COOLNESS THROUGH A STRAW.

piazza of the Oriental for five dollars. In fact all that is unique on Coney Island is west of the Hotel Brighton. The Manhattan and the Oriental are decorous, high-toned and fearfully expensive. They are very much like any other sea-side hotels, broad piazzas, fashionable women, dudes, impudent waiters who regard any thing less than a dollar "tip" an insult, and most unpleasant of all, a certain contingent of regular guests who regard the transient visitors with a contempt which they take no pains to conceal. But the west end is *Sui generis*. From Norton's Point to Brighton eager excursionists, whose dimes are plentier than their dollars, tire themselves out in their wild efforts to have a "good time."

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your grip, see how much you can lift, how hard you can strike with a large wooden mallet, test the capacity of your lungs, how heavy a blow you can strike with your fist, and how much you can kick, at the modest price of five cents a test. The obliging attendants will write the results on a series of cards and thus for forty cents you are enabled to collect a more or less valuable amount of information concerning your own frames and get thoroughly exhausted in the bargain. A dash through the air upon the "coaster" or a ride on the merry-go-round will rest you, however, and do not be afraid



THE MERRY-GO-ROUND.

that you will compromise your dignity by indulging in these supposedly infantile recreations. You will see plenty of grave heads of families to bear you company. The staid and sober grandpapa goes careening around upon the back of an impossible wooden horse to the hideous strains of a steam organ, his benevolent face wreathed in smiles and beaming happiness through his glasses. Pretty girls and their beaux, staid matrons and misses with babies in arms follow each other in endless, and apparently never wearying succession.

The "coaster" on the gravity railroad, as it is called, is a remarkable contrivance which I very much doubt would thrive any where except on Coney Island. It is a sort of summer toboggan slide. You are hauled to the top of a very high trestle by means of an elevator. In front of you stretches downward about a quarter of a mile of track with an incline upward at the other end. You take your seat in a car, hold your breath and grip the sides of the car, a whizz and you are at the other end trying to realize how more quickly you can spend a nickel than make one. But it is fun; there is a sort of exhilaration about the dash through the air, and the chances are that you will try it again. You begin to have a very clear idea of how a bullet feels when it is fired from a gun; that is, supposing a



THE COASTER.

bullet can feel. Here again you will find no lack of aged company. "It would never do to let the children go alone," is the excuse, and the youngsters and the elders enjoy the ride together.

On a pleasant day the bathers furnish no end of amusement to the philosophically inclined. What wonderful freaks of nature are revealed by the treacherous bathing suits! The fine-looking woman who entered her bathing-house a pleasing figure, albeit a trifle tightly laced and somewhat inclined toward embonpoint, leaves the salt sea waves a dripping mountain of flabby flesh,



BATHERS IN THE SURF.

while her tall and graceful male companion appears frightfully lean and scrawny in his tired bathing suit. And these bathing

suits! It is a constant conundrum in my mind why the little man is invariably rigged out in the big man's suit. Or if the lightweight tries to get a costume which comes somewhere near fitting him, he is given a boy's size, which leaves exposed a vista of bony legs and fleshless arms more interesting to the anatomist than pleasing to the casual observer. But these are the humors of Coney Island.

If you would see the fashionable bathing costumes you must go to the east end where every thing is *a la mode*. But with bathing, as with every thing else on this remarkable little strip of sand, the genuine fun is at the west. Here you see whole families sporting in the surf together. The trim built German maiden frolics with her ponderous papa. For, of all our imported citizens, the Germans understand best how to enjoy themselves *en famille* in a rational way. The bathing dresses of the young women are always modest and generally becoming. I can not say as much for the costumes of their more fashionable sisters at the east end. They are yearly growing tighter and beautifully less. French styles are copied with no advantage to our American modesty. And speaking of that almost obsolete virtue did you ever notice the difference between winter and summer modesty in our self-styled "upper circles"? At several fashionable weddings last season I was surprised to see how little is worn above the waist.

In the summer the brevity of costume is there but it has gone down to the other end. The young women who, last winter, would have died of shame if more than the toe of their pretty slipper, peeped from beneath the lace frill of the ball dress, patter up and down the sands in garments which show off their limbs to the fullest advantage.

But it is Coney Island again. We must expect all sorts of extremes there. It is a sort of summer carnival where each has a



SPORTING ON THE BEACH.

good time in his or her own way. Coney Island, a wilderness of hotels, booths, museum, and amusements where every feature of our cosmopolitan life is seen in exaggerated and grotesque shape, a law unto itself, unique, and because it is unique beyond criticism.

The artist and I returned home tired. Every body goes home tired from Coney Island. We had seen every thing, that is what we went for. We were poorer by several dollars, but that is to be expected when one goes to Coney Island.

ALLAN FORMAN.

Lassoing Grizzlies.

Now that the buffalo is gone, says a writer in *Leslie's*, the grizzly bear is, with the exception of the moose and elk, our biggest game; and hunting him in his haunts among the Rocky Mountains is undoubtedly the most exciting, the most hazardous and altogether the grandest sport that our continent affords. The proper time to seek him is in the fall of the year, as the animal hibernates during the winter, and his skin is worthless if he is killed in summer. The sportsman usually still-hunts him, or else obtains a short-range shot at him by putting out a dead antelope or elk for bait. Sometimes he is trapped, or killed without risk or sport by a spring-gun. The most novel mode of grizzly-hunting, however, is that adopted by the cowboys of Wyoming and Montana. The cowboy can do almost any thing with his lasso, and it occasionally "comes in handy" for the capture of a 1,000-pound bear. Bruin is surrounded by the dogs and mounted men, and, as he rises on his haunches to stand at bay, offers an excellent mark for the unerring loops, which quickly drop over his head and enmesh his paws. So that he falls an easy victim to the gun and the knife, though he dies game, and usually makes dead dog of a number of his canine tormentors.

In all meanness there is a deficit of intellect as well as of heart, and even the cleverness of avarice is but the cunning of imbecility.—*Bulwer-Lytton*.

The Church Nap.

"And now," concluded the clergyman, after a long discourse, "we have seen that millions on millions of people have benefited by following this scriptural injunction."

Just then Lawyer Stubbs woke up long enough to say in a sleepy manner: "Move that the injunction be made permanent."



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A SIAMESE PRINCE.

Prince Devawongse, Minister of Foreign Affairs in Siam, Now Traveling with His Suite Through the United States.

The Siamese Prince Devawongse who is going across the United States, speaks English well. To hear him with your eyes shut you would never suppose the speaker was a heathen. He is the son of the old King of Siam, but by a different wife than the present king's mother. As the old king had 1500 wives not all the young king's brothers and sisters can claim the same mother. Devawongse's mother was a favorite, however, and he was given a good education, something that does not happen to all the King's progeny. The King's sons were educated by an American, J. H. Chandler, a New York man who went to Bangkok about 1837 and spent his life there. He was American consul for many years and finally entered the King's employ. He made treaties opening Siam to Europe and the United States; bought machines of all kinds for the King and taught his sons. His special charge was the present King who ascended the throne at the age of eighteen in 1869.

Siam has never been on very friendly terms with the United States. No native of Siam has ever been sent to this country by the King to be educated. England, however, has a good many in her schools. The reason lies in a very unfortunate affair that happened in 1875. Under the King's direction his trusted agent, Mr. Chandler, gathered a large exhibit for the exposition at Philadelphia. The night before Chandler



was to sail as commissioner the American consul, a depraved official who is still hiding in Europe never having dared to return to America, went into the King's Park, entered Chandler's house and arrested him on a trumped up charge. The consul really wanted to come to America himself as commissioner and was jealous of Chandler. The King was terribly enraged. He sent word to the officers of the United States war steamer *Ashuelot*, and she steamed up into the harbor. The consul subsided, Chandler was released and quiet was restored. The King had no authority over the consul, but Mrs. Chandler by his advice sailed for this country, went directly to Washington, saw Hamilton Fish, then Secretary of State, reported the disgraceful affair, and the result was the consul's dismissal. The King refused positively to send an exhibit to Philadelphia. He said he would seem thereby to be the guest of the United States, and he would not be the guest of a country that had such a representative as the American consul. He told the officers of the *Ashuelot*, however, that he would give the exhibit, part of which had been shipped, to the United States Government if they would transport the rest of it then ready for shipment. This was done. Mr. Chandler was to bring with him twenty Siamese young men to be educated in the United States. The King revoked the order and had them taken to England.

The present Ambassador will not reside in this country. He is accredited to Great Britain, the United States, Brussels and the Hague. He will live in London. He is a handsome young man of twenty-nine, who evidently knows how to handle himself in State society. His face is of a delicate fawn shade, his eyes are black and piercing, he wears no whiskers but a shiny little black mustache. His usual dress is a broadcloth Prince Albert coat, light-checked trousers and patent-leather shoes, woman's size, No. 8. In movement he is graceful and dignified. His conversation is easy and bright. He is very liberal-minded, but says very frankly that he is a Buddhist "or a heathen, if you please." This has been the religion of his ancestors for nine hundred years, and he is satisfied with it. At the same time he believes in religious liberty, and missionaries have every advantage in Siam.

He Wanted Both Kinds.

He was an amateur yachtsman, and he looked around the store in a timid way before he hesitatingly asked:

"Got any tacks?"

"Yes, sir, plenty of 'em. How many papers?"

"I guess I'll take a paper of starboard and a paper of port. I'm going a-sailing, and I want to be provided with both kinds." —*Detroit Free Press*.

The poor man with industry is happier than the rich man in idleness. The slave is often happier than the master, who is nearer undone by license than his vassal by toil.

If through curiosity, as many do, you pry into an evil book, your curiosity is as dangerous as that of the man who should take a torch into a gunpowder mill merely to see if it would blow up or not. I charge you to stand off from all those books which corrupt the imagination and inflame the passions.—*Talmage*.

A WATCHMAKER'S EPITAPH.

The following unique epitaph is to be seen on a tombstone in Lydford churchyard, Devonshire, England:

Here lies in a horizontal position
The outside case of
George Routledge, Watchmaker.
Integrity was the mainspring and prudence
the regulator of all the actions of his life;
Humane, generous and liberal,
His hand never stopped till he had relieved
distress;
So nicely regulated were his movements that
he never went wrong,
Except when set a-going by people who did
not know his key;
Even then he was easily set right again.
He had the art of disposing of his time so well
That his hours glided away in one continued
round of pleasure.
Till in an unlucky moment his pulse
stopped beating.
He ran down Nov. 14, 1801, aged 57,
In hopes of being taken in hand by his Maker,
Thoroughly cleaned, repaired, wound up and
set a-going
In the world to come, when time shall be no
more.

GEM HUNTING.

THE TRICKS OF THE LAPIDARY'S TRADE.

Expert's story of men who have been made poor by supposed discoveries of diamonds.

"No, sir," said the expert, spreading out his ringless fingers and striking his chainless waistcoat, "I don't wear any jewelry whatever."

"And what is the reason of that?" asked the reporter.

"Simply that I don't approve of those who are in the trade doing so. For one thing, it causes bother with customers, who are likely to compare what you have on with what you offer them, and altogether I think it is better to do without it. I have gold cuff buttons, as you see; but I think I'll discard them, too."

"Are any native diamonds worn in this country?"

"Well, only about 100 American diamonds have been found as yet; but I dare say a few are worn here. There would be plenty if all the alleged diamond finds had been genuine. Why, there have been at least 100,000 bogus finds! Well-known firms like Tiffany & Co. are perfectly pestered by geniuses who can't tell a bit of cut glass from gems of the first water. Tiffany & Co. get as many as twenty or thirty letters of inquiry in a week."

"But the genuine finds were mostly discovered by accident, weren't they?"

"That's true enough. The first American diamond—the Oninoo, as it was christened—was picked up at Manchester, Va., in 1855 by a laborer. Then you will remember the native diamond that came to Tiffany's about a year ago. They sent their mineralogist, George F. Kunz, to inquire about it recently, and he learned that it had been found by a small boy called Willie Christie on the Alfred Bright farm, near Dysartville, McDowell Co., N. C., sixteen and one-half miles from Morganton and twelve from Marion. He got it on the side of a little hill, near a spring. He was attracted by its lustre, took it home and put it on a shelf for two weeks. Then he showed it to a village storekeeper. A man who had been in the South African diamond mines was called, and he immediately tried to buy it, beginning by offering \$5, and finally offering \$50. But he didn't get it; and it was sent to Tiffany & Co. and bought by them for a handsome sum."

"Are people who are well informed on the subject ever misled by a stone?"

"Well, some are fooled who, you would think, should know better. Now, there was a certain geologist—I won't mention his name, for he's dead—and he once sent a common paste imitation to a jeweler as genuine. But I could tell you some queer things about him. He was a kind of

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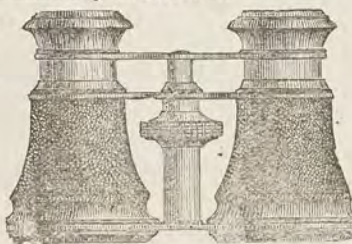


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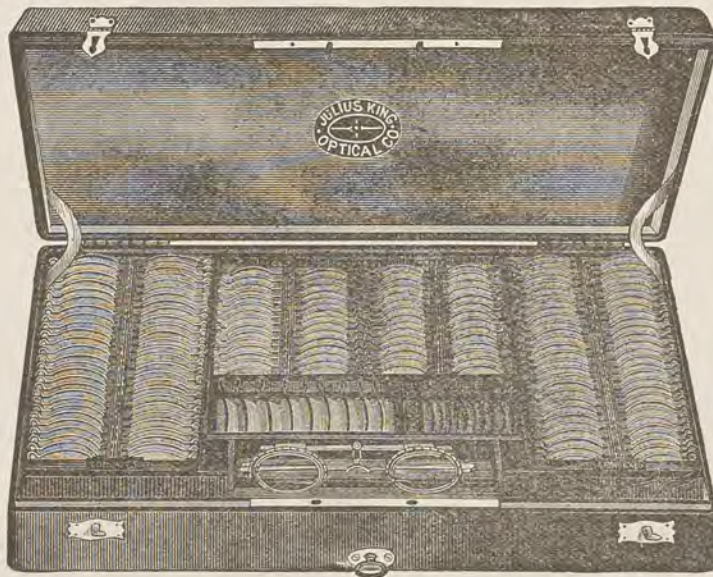
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John the Baptist of diamonds. He had an idea that there were diamonds at the place where he lived; and he wasted a good deal of his time in grubbing around and in prophesying about it. He would get up on a stump and shout: 'As truly and as surely as the laws of nature are immutable, so surely will diamonds be found in this here locality!' But they haven't been yet. Diamond-seeking cranks would make more money in dry goods. They always remind me of the old school-book story of Whang, the Chinese miller. Old Whang ran a grinding mill in the flowery land (no pun intended); and he fell to dreaming about a lot of treasure buried beneath the foundation-stone of his old mill. For two nights he laid the blame on a heavy supper of birds' nest; but the third night he dreamed that identical dream once more; so he banged out of bed and yelled 'You git!' to Mrs. W. 'The house is coming down, and we're going up. I shall be a mandarin as sure as my name's Whang!' Well, he didn't rest till the old place was levelled. Lastly the foundation-stone was disembedded. There was nary a treasure; so, seeing that he had brought beggary on himself, he hanged himself with his own pigtail."

"How did he manage that?"

"Oh, I don't know. Cut it off first, most likely. That's not the point. It's the moral of the tale that's worth remembering. Now here are some stories about bogus finds. They have their moral, too, and I think I would make it, 'Don't give a cat's imprecation for the opinion of the average local, country expert.' They have caused no end of trouble, anxiety and expense by their hasty and half-trained judgments. Some years ago, a poor fellow called James M. Smith, a ploughman, at Gibsonville, Guilford Co., turned up what he thought was a gem with his ploughshare. He took it to one of those 'local experts,' who went through some farce of examining it with a microscope, and said it contained various small diamonds. Of course, the finder was overjoyed, and thought he was going to make lots of money. He took a trip to New York, and was at a jeweler's at 7 o'clock in the morning, only to learn that his treasure was a pretty quartz pebble, worth perhaps about \$5."

"That was hard luck?"

"Yes; but he's not the only victim of quartz—with a z, of course. I know of a lady who kept a supposed diamond for thirty years, and then was rudely disabused by being told by an expert that it was only a quartz crystal."

"Is there ever a 'diamond furore' over a supposed find?"

"Oh, yes; its as bad as the gold fever and turns a neighborhood upside down while it lasts. About a year ago the people of Danbury, N. C., had a 'time' they won't forget in a hurry. James Pepper, a farmer there, picked up a diamond-like stone while he was ploughing. These 'finds' are made that way often. He submitted it to the local jeweler, and was overwhelmed with delight to learn that he was the possessor of a fine American diamond worth at least \$7,000. Well, sir, the whole village went a-ploughing for diamonds. The farmers reaped fancy prices for allowing enthusiasts to scratch their land; and whenever a hen made a scrape and sat down in it she got no piece till all the diamond-hunters had examined it. It was lively for the hens, and they were harassed so and had to get into so many scrapes in a day that they must have wished that they could go to pot at once and be done with. All of this resulted in plenty of dust but no diamonds, and when at last old man Pepper sent his jewel to New York and got back word from an expert that it was a quartz crystal, there was a bigger how-d'ye-do than a bank failure makes. I think there'll be no more diamonds from Danbury!"

"And its not only diamonds that peo-

ple get left on," continued the expert, fanning himself. "Such a thing as a six ounce ruby would cause considerable commotion. None of that size has been found yet; but a James W. Thomas, of Elmore Co., Alabama, recently thought he had one that would weigh six ounces, 'after cutting off all the roughness,' as he expressed it. He was so careful of it that he deposited it in a local bank for safety and said that he would on no account send it to any one on approbation. He got out sale circulars, asking for bids; but the opinion of experts that it was worthless dashed all his hopes to the ground."

"People must regard you experts as very malevolent beings," said the reporter.

"Yes, they do sometimes get the idea that there's something wrong. Now, the fact is there's often 'something wrong' on the other side. Turquoises of a lovely blue color have been sent from New Mexico to the East, and an expert has discovered that on dipping them in ammonia the blue disappears and green asserts itself. Now, a green stone worth only \$10 would bring \$1,000 as a blue stone. The natives of Arkansas are also up to a thing or two. A nice rock crystal pebble used to be found there; but tourists were so fond of the stones, and bought and carried off so many, that they grew scarce. A native, determined not to lose the snug revenue they had yielded him, hit on an ingenious plan for making them. He got a lot of natural rock crystals, put them in a box, and let a stream of water run on them, with the result that they were worn into the desired size and shape."

"But you don't mean to tell me that there is no tricking on the part of the jewelers?"

"Oh, for that matter, they are up to some dodges too. I wish you would warn ladies who have a horror of 'imitation diamonds' that when they wear Lake George, Colorado, California and other 'diamonds,' as well as Rhinestones, they are wearing nothing more nor less than what is technically called 'lead paste.' Here's something else: A great many people find transparent pebbles, take them to be cut, and often get back a stone twice the size of the original. Sometimes they notice the difference, but generally they don't. Well now, suppose you take an interesting walk with your young lady, find a pebble, and intend to have it cut and presented to her as a memento of the occasion. You carry it to a lapidary. What does the lapidary do? As soon as your back is turned he chucks you pebble out of the window, selects a ready-cut stone from his collection as near the size of yours as possible—if he can't get one exactly the same he takes a bigger one, thus showing a sublime knowledge of human nature. You call, pay for the 'cutting,' and your girl wears the lapidary's stone contentedly. 'Where ignorance is bliss,' you know. The fact is that these ready-cut pebbles can be bought from abroad at about one-tenth the cost of cutting. They are extremely common in some countries.

"Now, I'll 'give away' one more interesting fact. At one of our fashionable watering-places—I dare say about the most fashionable in the Northern States—the local lapidary does a nice business in moonstones; this is how he does it. He has a few on view, and if a stranger asks about them he is told that they are to be found on the beach, and that they are well worth looking for. The guileless stranger straightway begins to take his seashore constitutionals, with his eyes fixed on the ground. By and by he finds a pebble and takes it to the lapidary.

"Sure enough. You've struck a moonstone. Your luck's in, says that man, who so palpitates with philanthropy that he pust all his brethren in the way of

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picking up precious stones, as a pigeon picks up peas.

"Better take it and cut it for me," says the stranger.

"Certainly," replies the philanthropist. Accordingly the stranger departs and comes again in a few days. He receives a genuine moonstone; but when it is understood that its costs the lapidary much less than his charge for the fictitious cutting, it will be seen how he comes out ahead.

"But we in America are not yet so far advanced as they are at Brighton, England, where bogus emeralds are continually being found and cut, the supply being kept up by green glass thrown into the water, so as to give the lapidaries something to do.

"By the way, I must tell you of some curious things that have come under my observation. In Montana, pretty little red, green and blue sapphires are often found in the sluice-boxes when washing for gold. In Arizona, garnets, called there 'rubies, and peridots, known as 'Job's tears' from their form, are found frequently on ant-hills, whither they have been carried by ants and scorpions. Again, there are microscopic diamonds. These have been discovered in America in platinum sand."

"They must be rather small, might make a breastpin for a fly, I suppose;"

"No, they wouldn't. I think they would hardly be big enough for a mosquito," said the expert. Then he reached down a box and began to finger a fortune in jewels, and the reporter departed for fear of kleptomania.

THE *Manufacturers' Record* for the last week in June, published its semi-annual review of the industrial growth of the South, giving the name, location and character of business of all new manufacturing and mining companies organized or established in the fourteen Southern States during the last three months, the number of new enterprises and the amount of capital invested since January, 1887, as compared with the same time in 1886. These figures show that the industrial activity throughout the South during the first half of 1887, was far greater than ever before, the number of new enterprises organized or established in that time, excluding all that are merely projected or talked of, having been 1855 against 812 for the same time last year, or largely more than double. The capital invested during the first six months of 1887, was \$161,192,000, as compared with \$63,618,300, in the same period in 1886.

A TASTE OF HIGH LIFE.

"Last season my maid of all work asked early in the spring if she might have the mouth of July. I said yes, not realizing the trouble there was in getting help," said a prominent Detroit lady, "As I could not find a servant I decided to close the house and go for the month to one of the fashionable beaches near home. While watching the bathers the morning after I arrived I noticed one, a pretty looking girl picturesquely dressed, who struck me familiarly. As she came near me I recognized her as my maid Julia, notwithstanding she had changed her hair from dark brown to a pale gold, and I spoke to her. To my surprise she entirely ignored me, never showing by even the raising of an eyebrow that she recognized me or the children. On returning to the hotel I found that she was registered under the name of a friend of mine, a well-known society young lady, whose name she kept during her stop there. Why didn't I expose her? What would have been the use? She wore better clothes than I did, was bright and pretty, and had gathered around her the cream of the society there. The probability is that if I had said anything no one would have believed me."—*Detroit Tribune.*

HER PREFERENCE.

He was handsome and tall,
The envy of all
The men as he walked by her side,
While slowly the light
Of day changed to night,
And merrily rippled the tide.

She, pretty and sweet,
Entrancing and neat,
Demurely beside him was walking,
While softly the air
Caressed her fair hair
And listened the while to their talking.

"You'll please pardon me"—
He glanced, playfully—
"If really my question should tire!
Do you care for men tall,
Or those who are small—
What kind of men do you admire?"

Her lashes quick fell
And veiled her eyes well,
"No pardon for such a request;
I like mankind all,
Both little and tall,
But, then, I like Hymen the best."
—*Boston Budget.*

WASHINGTON LETTER.

The Merry Archers Meet at the Capitol City—Tests of Skill Between Fair Women and Brave Men.

[Special Correspondence.]

The national meet of archers held here recently was a delightful gathering of bright, sharp-eyed people. The taste for archery appears among people of culture and social worth, and a national meet of them is noteworthy. In almost no other field of sport can such a gathering be ex-



A BULL'S-EYE SHOT.

pected. To the archery meet come matrons and school girls, the demure rural school ma'am and the young woman of the world who knows how to handle herself, no matter where she finds herself. The gentlemen were professional men, for the most part lawyers, doctors, journalists, literary men, and, now and then, a society man with money, and no particular calling.

The contests were held on the beautiful, broad, green parade ground at the Arsenal. Not far away was the old building in which Mrs. Surratt and the conspirators with John Wilkes Booth, were tried and condemned. Here, too, the limp body of Booth was received when his captor returned from old man Garrett's burning barn, where Boston Corbett shot the assassin. But none of these dire reminiscences clouded the occasion, and the merry bowmen and laughing bow-women kept up their ceaseless round of shooting, unconscious of the historic associations of the place. The officers and their families at the Arsenal made the visits of the archers doubly delightful by their many courtesies. The last day of the meet the gentlemen of the Third artillery improvised a contest between a team with revolvers and one with bows. The result spoke well for both weapons, but the revolvers did the best execution.

The scene during the shoot was exhilarating in the extreme. The broad emerald sweep of lawn; the great old yellow barrack buildings, the big guns and trophies strewn about; the sentries pacing their beats; the Potomac lying far on the south and whitened with sails; the hazy hills of Virginia beyond, while towering on one side gleamed the Washington monument and on the other the shining white dome of the Capitol seem to hang in the sky. On the green turf was a constantly shifting panorama in which rosy-checked girls and bronzed young men were the actors, and a steady round of jokes and compliments, shouts and laughter filled the din. Eight targets made of straw and banded together with concentric circles of eight colors were placed for the ladies and eight others for the men. There is quite a material difference between the strength, if not the skill, of men and women in using the bow,



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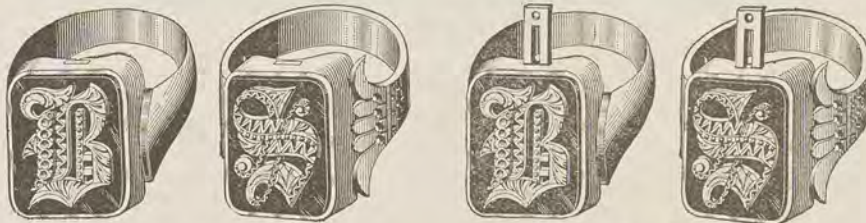
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and the men shot at longer range. Under the rows of trees that lined the parade ground sat the visitors comfortably in their arm-chairs equipped with fans. The sun was hot, but cool breezes from the Potomac tempered the heat.

The bows of the men were generally of yew, but sometimes of yew and hickory together. Their arrows were twenty-eight inches long. Those the ladies used were slightly shorter, the bows being five feet and a half long and the arrows twenty-five inches. Some of the outfits were imported, but the best bows seen at the meet were of American make. The yew and hickory bow



DRAWING THE BOW FOR LONG RANGE.

seems to be a great favorite, and the shooting at the meet proves its excellence. The two woods are glued firmly together, the hickory being on the outside and the yew on the inside. The former gives superior strength, the latter elasticity. The heaviest bow weighed but half a pound; but it took a forty-pound pull to draw it. During the first contests the crowd of urchins present thought they would have their fun in catch-

ing the arrows in their flight, and the youngsters dodged in and out among the targets in a manner that was simply appalling. They did not dream that a steel-pointed arrow, well sent, was regarded as a more dangerous missile than a pistol bullet. It required several warnings to get the boys to keep away from the targets. But for a time they played there in as much danger as there would have been in dodging about a rifle target.

The ladies who entered the lists proved that archery is a good thing physically for their sex. They were, without exception, finely developed physically. There were square shoulders, lithe, strong figures, muscular arms and ruddy, hearty complexions. The eyes, too, of bow-women can be praised. Not that they were soft and melting and shot darts more deadly than steel-pointed arrows. All that they did, of course. But the girl who shoots with a "bow'n arrow" develops a keen eye that inspires you with the notion when you look into it that here is a woman who has nerve and good judgment, and is not to be trifled with.

The most interesting contest was what was called the double York round for men and double National round for ladies. The former is an English competition and affords the best tests of marksmanship and strength. A Rev. Mr. Ford, an English clergyman, has the best score in this round. He made 1,200 in a double round, which no other archer has ever approached. Seventy-two arrows are fired at 100 yards; 48 at 80 yards and 24 at 60 yards. The championship of the United States stays with Mr. W. A. Clark, of Cincinnati, who won it last year. He is an old soldier and was wounded at Chickamauga. A part of the bone of one arm was removed, but he seems to shoot as well as those who suffered no such loss. Mrs. Phillips, of Michigan, won the ladies' championship. Nord.

She Could Stand It.

"Oh, darling!" he said, while a perceptible tremor was in his voice, "it is horrible to contemplate how nearly you were drowned. I could never bear the idea of burying you in the dark cold ground."

"Well, then, how would cream-ating do?" she saucily inquired, as she glanced up at the restaurant sign above their heads. "I'm sure I can stand that."—*Newman Independent.*

It Gave Her Away.

A plump-looking tailor-made girl dropped a nickel into the slot of a self-weighing machine; and when the needle reached ninety pounds, it stopped there.

Then the girl moved on, and a young man, who had observed the proceeding at a respectful distance, remarked to himself:

"Somebody is going to get badly fooled there."—*Drake's Traveller's Magazine.*

NOVELTIES IN JEWELRY.

The favorite flower designs are now used to belt buckles.

Toilet articles of oxidized silver in heraldic designs are much used.

A new ornament for the hair is a large oxidized silver ball set in an amber pin.

Necklaces of silver beads are becoming fashionable. They have much the effect of pearls.

Silver match boxes are ornamented with gorgeously colored imitations of fishing "flies."

Calla-lilies of satin silver, with pistils of gold, are worn as hairpins.

A new hairpin is a carbuncle bug pierced by a pearl-tipped pin.

Enameled morning-glories form exquisite brooches streaked with diamonds.

Three or five opals in a row form an effective ring for those not dreading the baleful effects of the stone.

Memorandum-tablets of etched silver are decorated with gold bugs, and hang from the chatelaine now attached to silver belts.

Arbutus blossoms are arranged in clusters and bedewed with diamonds for bonnet-pins.

Stylish silver bracelets are made of two strands, one smooth and the other fretted, and finishing in a bar and ring.

Rings are set in the form of a letter S, a ruby and sapphire as the extremities, and clustered diamonds the body.

Greenish gold and diamonds are combined in a leaf-shaped pin.

Pearls are prominent just now in fancy articles of jewelry.

Two gray pearls beneath a diamond is a new idea in aural ornaments.

Jockey caps in enamel and gold are worn as brooches by ladies interested in races. The gold peak is edged with tiny diamonds.

Watch-chains of red gold are "taking" just now.

Combination rings of hyacinth, topaz, tourmaline, aqua-marine and golden beryl are fancied.

Garnet and pearl rings are set in a line with the gold band.

Silver daisies with diamond dewdrops are admired for bonnet and lingerie pins.

Apple-blossom pins are seen among the flower enameled jewelry.

Gentlemen fancy cameo rings with the gold on each side handsomely engraved.

Dog-collars of woven chain-armor are stylish, with belts of the same.

White enameled sleeve-buttons are decorated with a golden lattice-work.

Golden pencils are handsomely chased and tipped with a jewel.

Tiny diamonds are used for stars, hearts, flowers, rings, birds, etc., which are sewn to the velvet dog-collars worn close about the neck.

Two kittens playing with a knitting-ball, in gold, form a novel brooch.

Delicately enameled forget-me-not's form ball-earrings with tiny diamonds in the centre.

Horseshoe brooches show a combination of two or more varieties of stones.

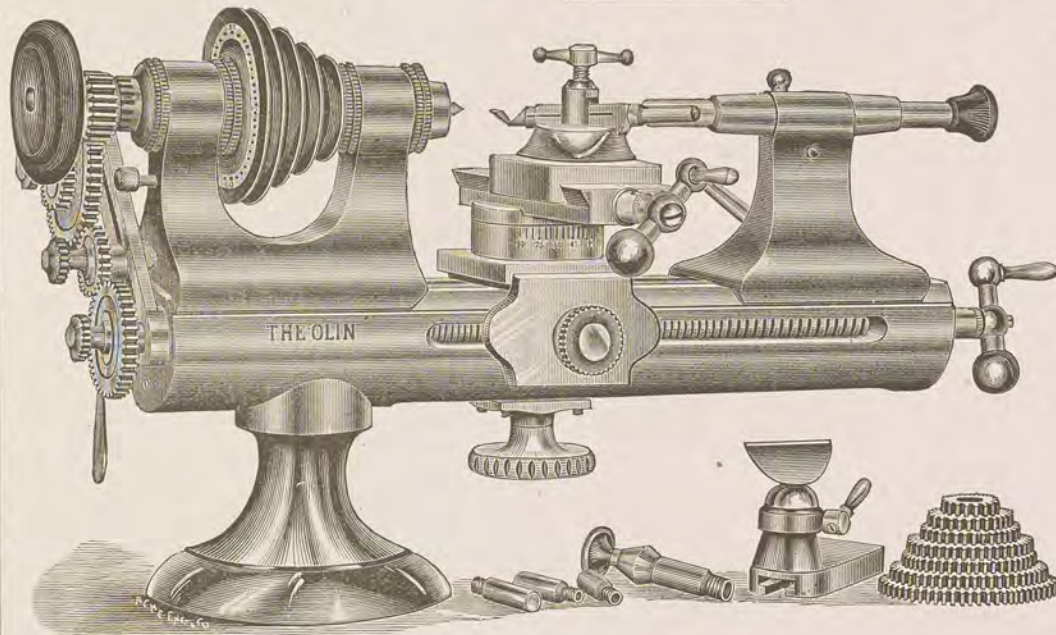
Scarf-pins of pearls and sapphires or rubies are worn.

A silver anchor entwined with small flowers, in enamel of natural colors, is the newest idea in lace pins.

Cylindrical porte bonheur bracelets are ornamented with a four-leaf clover in green enamel with a diamond stem.

Beautiful bouquets de corsage, bunches of fuchsia, sprays of apple blossoms, branches of holly and the like, made of jewels and enameled gold, are the rage for evening dress in Paris.

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MR. AND MRS. BOWSER.

Mr. Bowser as a Melon Expert—His Terrible Tussle with Cholera Morbus.



FEW days ago we were speaking of watermelons at the table, and I remarked to my husband that a lady acquaintance of mine, who does all the buying for her table, had been "stuck" on three dif-

ferent occasions with green melons. "Just like a woman!" snorted Mr. Bowser as he buttered his corn afresh. "I don't suppose there is a woman in the country who can tell a ripe melon from a green one."

"But the men can!" "Certainly. I shall send up a watermelon for dinner. It will be ripe and delicious. I shall select it at a glance."

The melon came up about ten o'clock and was placed on the ice until dinner. When we were ready for dessert the girl brought it in. It was as green as grass. Nature hadn't even begun to paint the interior of that melon red. I had to laugh.

"Well, what are you te-heeing about?" calmly inquired Mr. Bowser as he looked up.

"That melon!" "What about that melon? I see a melon here, but I don't see any reason to giggle."

"It's green!" "Oh, it is! Mrs. Bowser, I believe you were born on a farm, and I believe you lived there until 12 or 15 years old. The fact that you don't know a ripe melon from a green one might astonish some folks, but it doesn't me. If you should stand out doors in a rain storm I shouldn't be the least bit amazed!"

"Mr. Bowser, do you call that a ripe watermelon!"

"Certainly. Perhaps this hot weather has affected your head."

In order to carry his point he sat there and worried down two large pieces of melon, uttering a "yum-yoof!" occasionally to show how delicious it was, and charging the cook to be careful and not waste a single seed, as he wanted to send them to the Agricultural Bureau in Washington. When ready to leave the house he ceased picking his teeth for a moment to say:

"Mrs. Bowser, owing to your conduct at the dinner table, I shall have to request you to let the remainder of that melon severely alone."

"Very well, sir!" "If you eat any watermelons this summer it will not be in my house, although I shall have watermelon every day for the next three months!"

With that he walked off and took the car. I expected to hear from him inside of three hours, and I was not disappointed. Indeed, it was only an hour and a half when I was called to the telephone, and a voice inquired:

"Hello! is that Mr. Bowser's residence?"

"Yes, sir."

"Is Mrs. Bowser home?"

"She is. I am Mrs. Bowser."

"Is your husband a short, fat, bald-headed man, who thinks he owns seven-eighths of the State of Michigan?"

"Why, yes, something like that. Why?"

"This is Jobcock's drug store, on Hammersmith street. Such a man as I have described, and giving his name as Bowser, is here in the store, tied up in fourteen dif-



"I'LL BRING THE DOCTOR A PIECE."

ferent knots with the bilious colic. We didn't know but he was a tramp playing off on us for a drink. We'll send his remains up in Boyd's ambulance."

They came up. The remains were still alive and very indignant. They had scarcely brought Mr. Bowser into the house by the legs and arms and left him on the lounge, when he pointed his finger at me and hissed:

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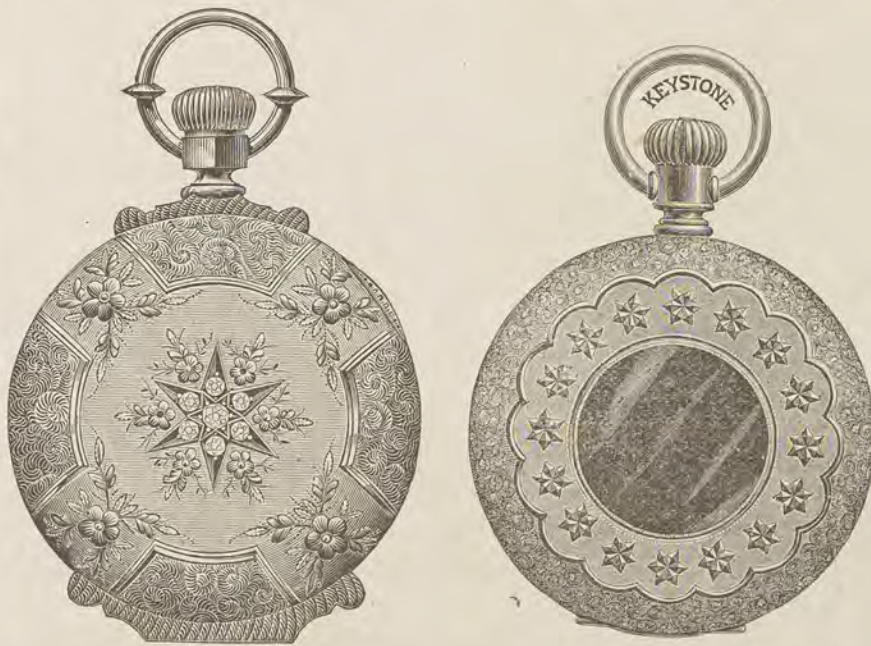
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"Borgia! Would-be murderess!" "Why, Mr. Bowser, what on earth are you saying? What can you mean?" "You were jealous of me about that melon! You poisoned it!"

Well, I called in a couple of neighbors, sent for the doctor, and we got Mr. Bowser to bed and dosed him inside and heated him up outside, and after three or four hours' hard work he became easier. The doctor said it was a case of cholera morbus, and Mr. Bowser faintly replied:

"Doctor, I can't agree with you!" "But it certainly is." "It may seem like it, but I think all the symptoms point to poison!"

"Nonsense! It's a plain case of cholera morbus, and if your wife hadn't known just what to do and worked over you as she has, you'd have had a much closer call. What did you eat this forenoon?"

"Only my regular food." "You forgot that watermelon, Mr. Bowser," I put in.

"Watermelon, eh?" added the doctor.

"There's the key-note!"

"But it was ripe, doctor," protested Mr. Bowser.

"I'll bring the doctor a piece and let him see it."

Mr. Bowser looked at me with gun-flints in his eyes, but I would do it. When I had brought the melon, the doctor said:

"Bowser, you don't tell me that you ate two slices of this infernal stuff!"

"Y-yes."

"Then you are the biggest fool in Detroit, and you deserve ten times what you've got!"

I sat up most of the night with Mr. Bowser, in order to give him medicine at regular intervals. He seemed quite humble until he found himself able to dress in the morning. Then he said to me:

"Mrs. Bowser, I have a word or two to say to you, and I warn you to listen well! The next time you bring a green watermelon into this house and insist that it is ripe there will be a separation asked for in the courts, and I shall demand possession of our child!"—*Detroit Free Press.*

COUNTING THE STARS.

A Stellar Atlas to Be Composed of Over Fifteen Hundred Sheets.

French astronomers have inaugurated a movement to chart in their true positions all the millions of stars which are included in the first fifteen magnitudes. In order to accomplish this, twelve observatories are to be established in different parts of the Northern and Southern Hemispheres, and at each observatory photographs on 510 plates each are to be made. The charts thus obtained are to be combined in sets of four plates to the sheet, and there would therefore be 1,523 sheets in the whole atlas. Preparatory experiments have been made under directions of MM. Paul and Prosper Henry, which are critically explained in a recent French publication. Scientists predict a new era of stellar astronomy in connection with the opening of this great photographic work.

Richard A. Proctor, in a recent paper, estimates that twenty millions of stars will be shown in their correct position and therefore be in order for nomenclature and cataloguing, which would enable those requiring to get closer calculations in recording phenomena, to have object and data at once on hand. The great gauging telescopes of the Herschels would have shown, if it were possible thus to bring the whole circle of the starry firmaments under their survey, according to the estimates of a distinguished scientist, in a late European review, 100,000,000 or more. When we assume, according to the generally accepted theory, that each of this great number of stars is a center of a system like ours, which it is supposed is no bigger than the average, we are reminded of what we have often had occasion to admit before, that creation is a quite extensive institution. It is a great pity we know so little about it, and at the same time it is very fortunate that we know as much as we do.—*Demorest's Monthly.*

It is better when shipwrecked and cast into stormy waters, to flop over on your back and float than to thrash about and struggle and go to the bottom through exhaustion brought on by useless exertion.

The Whipping Post.

A Delawarean moved to Ohio, and was elected to the Legislature there. A bill relative to the penitentiary being before the House, he took occasion to compare the penal system of his former State to that of his adopted one, giving preference to the order of things to which he had been formerly accustomed. Among his arguments in favor of the whipping-post, he said that the same culprits were seldom whipped a second time, the disgrace of the punishment causing them to leave the State and begin life anew elsewhere. At this point of the new member's speech a voice from the opposite side of the chamber called out: "Is that the reason why we have gentleman from Delaware among us?"—*Harper's Magazine.*

CENTENNIAL.

CELEBRATION OF THE ADOPTION OF THE CONSTITUTION.

Programme of the three days' cerimonious observance of that Grand Event, to be held in the Quaker City.

The following programme, compiled in brief space for the information of visitors and residents, will be found complete so far as has been arranged.

THURSDAY, SEPT. 15.

Processional industrial display, which will illustrate, in contrast, the customs, domestic characteristics, commerce, arts, implements of industry, means of transportation, etc., etc., of 1787 with those of 1887, with a view to give ocular demonstration of the changes and national progress made in the first century of our constitutional existence. Gov. Beaver, of Pennsylvania, will hold a public reception in honor of the Governors of the States and Territories present at the celebration.

FRIDAY, SEPT. 16.

Private reception to the President of the United States by the Commercial Exchange. Military parade and review of the regiments and militia of the several States and Territories, accompanied by their respective Governors and staffs and by detachments from the Army and Navy of the United States, detailed for the occasion. About 25,000 men will be in line. The procession will be reviewed by President Cleveland and the parade will be commanded by General Sheridan and staff. Reception to the President of the United States at the Academy of Music.

SATURDAY, SEPT. 17.

Public reception to the President of the United States. Ceremonies in Independence Square. Opening prayer by Bishop Potter; introductory address by John A. Kasson, President of the Constitutional Centennial Commission; address by President Cleveland; oration by Mr. Justice Miller, of the United States Supreme Court; singing by 2000 voices; music by the Marine Band, of Washington; benediction and closing prayer by Cardinal Gibbons. Dinner to the President by the Hibernian Society at St. George's Hall. Banquet to the President by the University of Pennsylvania and other institutions.

THE Waterbury Watch Company have removed their New York offices to new and extensive quarters at 92 and 94 Liberty street, where all communications should be addressed.

MESSRS. JACOT & SON, importers of musical boxes, 37 Maiden Lane, New York, are introducing the use of the patent pinion on the cylinders of their music boxes, so that if the mainsprings should break, the pinion will be unscrewed, preventing the breaking of teeth in the barrel and cylinder. This, and other improvements that are in progress, will no doubt prove winning cards for this enterprising firm.

IN the August number, under the head "Situations Wanted," appeared the advertisement of E. B. Woodward, Morris, Minn. What he wanted was a good watchmaker with tools and references, and he offered \$15 per week for such a man. It is hoped that this will correct the error.

"WHAT shall we do with our boys?" or "Jack Knife Mechanics," which appears in this issue of the KEYSTONE, is worthy the careful perusal of all. The KEYSTONE has a lively interest in apprentices, also the boys of watchmakers and jewelers, because these boys are the future citizens, and have the opportunity

to become useful to themselves and their fellows. One who read the advanced sheets of this article, which will appear every month, said: "They are first-rate, and jewelers who have growing boys should give them the KEYSTONE and assist them to carry out the ideas conveyed in 'Jack Knife Mechanics.' They would keep the boys at home at nights, instead of roaming the streets at will, and prove a strong counter attraction to base ball, and be much more useful."

THE story runs that Mr. Edmund Yates had his pocket picked and lost his watch, worth \$200, in going to a Guildhall ball; whereupon Mr. G. A. Sala says: "This comes of being haughty, Mr. Yates, and wearing chronometers jewelled in many holes, and riding in handsome cabs, and such like. My own name is Old Artful." Mr. Sala left his watch at home, and his overcoat to boot, on the night of the ball, and the Commissioner of City Police allowed his humble four-wheeler to stand in the Old Jewry hard by Guildhall, so that he had not the slightest difficulty in getting there or in getting away to work, which was not over until two in the morning. Mr. Sala, by way of "chaff," as he is in receipt of quite \$7,500 a year from his pen, says his own particular handsome gold watch is at present in the keeping of his "uncle," who is passionately fond of articles of vertu, and politely declines to part with his time-keeper until a ridiculous process called "redemption" is gone through.

FOR SALE.

BARGAIN in thriving town of 12,000 inhabitants on the Mississippi River. Jewelry, book, stationery, fancy goods and news business. Best location in city. Next door to Post Office. Good reasons for selling. H. McPike, Muscatine, Iowa.

ONE Francis engraving machine, good as new. Add. "Jeweler," 59 Main St., Lockport, N. Y.

A GOOD jewelry business, nice stock, gold and silver watches, jewelry, silverware and clocks. Established 20 years. Chas. G. Weber, Flushing, N. Y.

FOR Cash. Well established watchmaker and jewelry business in Lafayette, Ala. Population, 1500. No competition. Stock and fixtures invoice about \$2500. Reason for selling, failing health. J. T. McConaghy, Lafayette, Ala.

SPECIAL NOTICES.

LOOK HERE. Within reach of all. Will send upon receipt of \$2.00, secret process of obtaining the different karats and colors in gold plating. Guaranteed satisfactory or money refunded. Box 95, Wakefield, Neb.

I WILL pay \$70 for information leading to the arrest of Charles Wolf, a German jeweler, 5ft. 6 in. tall, weight 135 pounds, light mustache and hair. Has a very noticeable scar on his forehead. Add. by telegraph or mail, J. E. Douglass, Chillicothe, Mo.

ON receipt of 50 cents I will send you 4 valuable receipts. Best way of putting mainsprings in watches in hot weather without breaking. Never fail. Best hard solder; can be made by any watchmaker with ease. Soldering fluid free of acids, will not rust tools. Best anti-oxidizer and tarnish cleaning fluid for watch, jewelry and silver ware. C. M. Kellner, Box 397, Minneapolis, Minn.

JEWELRY and stationery stock in live Michigan town for sale. Invoice, \$1500. Only store. Good run of work. Box E, Crosswell, Michigan.



H. H. HEINRICH, Chronometer Manufacturer, and Agent for K. Zimmerman Watches, No. 14 John Street, New York. Chronometers sold on installments on terms to suit the purchaser. Chronometers to Rent. \$5 per month. This cut is a Marine chronometer with Heinrich's adjustable balance. Certificate from U. S. observatory. In order to give an opportunity of examining and testing my chronometers, I will rent them out at the rate of \$5 per month, payable in advance. To those desiring to purchase chronometers, after examining them, an allowance of the first month's rent will be made from purchasing price. A large stock of new and second-hand marine chronometers on hand for the trade. All my second-hand chronometers are in the very best condition, readjusted, and look like new. Springing and Adjusting with C. A. Paillard's Palladium Ballance Springs a Specialty.

Positively no goods sold at Retail.

BOWMAN & MUSSER, Watches and Chains, Fine Tools and Materials, LANCASTER, PA.

See inside front cover of August KEYSTONE for illustration of "The Lancaster" Engraving Block. The only Block made which seems to fill the requirements of engravers.

WANTED.

AN established jewelry store doing good selling and repairing business, in live town not over 200 miles from New York. "D. K.," this office.

STRICTLY first-class watch and jewelry repairer and engraver, who can come well recommended as to honesty, sobriety and ability. We offer good wages and permanent situation. Must own tools. F. L. Davics & Bro., Nashville, Tenn.

WATCHMAKER of 20 years experience wants situation as salesman in tool and material store, or to take charge of repairing department. Good references. "Experience," this office.

TO exchange jewelry, fixtures, sewing machine or organ for 1 to 10 ft. wall silverware case and stand. Box 262, Hartford, Wis.

FIRST-CLASS watch repairer, permanent position for right man. "W. C.," this office.

LARGE size jeweler's safe. Milton Kohler, Hagerstown, Md.

WATCHMAKER. Address with learning-master's certificate, and letters from employers, "Frodsham," this office.

SITUATIONS WANTED.

GERMAN watchmaker, single. 10 years experience. Best of references. California, Oregon or Washington preferred. Chas. Herrman, Tacoma, Washington Territory.

BY a young man. Can do all ordinary watch clock and jewelry repairing. No objection to wait on customers, as have a good knowledge of retail jewelry, book and stationery business. Strictly temperate and reliable. Refer to Hollinshead Bros. jewelers, 8.6 Chestnut street, and best of home reference. Philadelphia preferred. W. F. Bargelt, Woodstock, Virginia.

BY young man age 19. Three years experience at the bench. Do all ordinary work. Best references. Samuel Maxfield, Orange, New Jersey, box 744.

J. J. Donnelly,

73 NASSAU STREET, Room 6, NEW YORK.

Gold and Silver Electro Plater, Fire Gilder and Colorer.

All kinds of work neatly and promptly executed. Orders by mail or express will receive prompt attention.

TOOLS

for

Jewelers, Watchmakers, Engravers, etc

Write for prices. All correspondence promptly answered.

Tallman & McFadden,

1025 Market Street.

Genuine American Mainsprings.

For all American and Foreign Watches.

If you want something better than you have been using, give them a trial. Satisfaction guaranteed. Manufactured by the Columbia Watch Spring and Jewel Company, (succeeding the Elliott & Moseley Watch Spring Co.) Elgin, Ill. Manufacturers of genuine American mainsprings, jewels, jewel settings and allied goods.

LA'NCHIN' OB DE SKIFF.

Dar's de June bug in de winder,
An' de glow wum in de sky;
Jess yo' wait ontill termorrer
Fo' de wil' goose on de fly.
Dar's de o'kum in de cranny,
An' de tn' am werry thick,
An' I reckon, Silus, dat we
Hab er skiff ter mak' 'em sick.

Chile, I hug myself wid gladness,
Fo' I wanter go Kerbyff
Sailin' out ont'er de riber
Wid de la'nchin' ob de skiff.
What's de matter wid us tryin'
For ter see ef she will smote
Up ag'in dose silber waters
Where de water-lilies float?

Hump yo' back, we tote de skiff dar
Whar de san' am shinin' white;
An' jess yo' an' I, us, Silus,
We will la'neh de fing termight.
Shobe her off an' jump in, Silus,
Dat's de sort—now let hur go.
Glor'us! Hain't dis 'simmons, sonny?—
What's de matter down berlow?

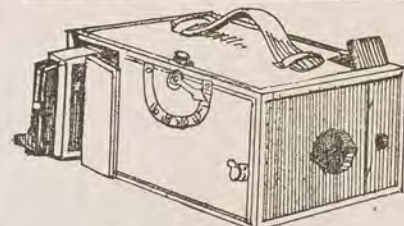
Gor a moughty! Whar's de dipper?
Use yo' hat, chile, or we sink—
Dat's merlasses on de o'kum?
Chile, yo' neber l'arn ter fink.
Down we go! now stretch yo' muscie;
Har we lan', dat's jess my luck;
Neber had er skiff or gazell
But dey bof war bou'n' ter buck.
—H. S. Keller, in Detroit Free Press.

AMATEUR PHOTOGRAPHY.

Growing Interest in the Art Everywhere—Uses to Which the Camera is Put by the Surgeon of the Cook County Hospital—Valuable Information Secured for the Benefit of Suffering Humanity—An Illinois Preacher Who Has Attracted Many Hearers by a Novel Device—Men Who Follow the Craze Enthusiastically.

Some time ago among the numerous "crazes" that claimed the time and attention of both old and young was amateur photography. The mysteries of the camera fascinated the beautiful girl who followed in fashion's whirl, and soon she had views of all the rustic bridges, tiny waterfalls and "lovers' walks" in her neighborhood, while the aged philosopher, with his pallid face, thin lips and gray hair, returned after his afternoon tramp with negatives of unsightly bugs and other specimens of the genus cimex. Nearly all who tried the work became interested in it, and so the craze spread till persons engaged in all kinds of business became students of the black art. From a pastime it has now grown to be recognized as an educator, and in the future photography will play an important part in the professions and industries.

The Cook County Hospital, says the Chicago Tribune, has a fine photographic outfit which is in charge of two internes, Drs. Post and Mitchell. When surgical operations are made three sets of pictures are taken at various stages of the work. A register is kept into which one of these sets



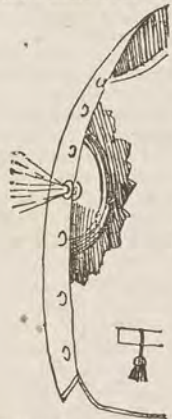
THE DETECTIVE CAMERA.

of pictures is pasted, and beneath is fully written up a history of the case. When it is known that a difficult or dangerous operation is to be made the register is examined and perhaps nine similar cases are found recorded. Perhaps different methods have been heretofore tried, and by one six of the patients recovered and by another three died. This at once tells which is the safer course of procedure. From one of the other set of pictures the views are reproduced upon glass slides to be used in connection with a magic lantern. A number of the hospital physicians lecture in the various medical schools in the city, and by the aid of the magic lantern they are enabled to give the students an excellent idea of the subject treated upon almost, if not quite, equal to the benefit of having seen the operation performed.

Throughout the country in the various schools and colleges photography is used in teaching geology, botany, etc., and is found to be a great aid to the instructor. The ministers, many of whom are quick to take advantage of all legitimate means to fill their churches, have not been slow to see that there was "something in it." It was not a very long time ago that Rev. C. H. Seaver, of Jefferson, Ill., was preaching to a comparatively small congregation. The same faces were always seen before him in the pews, but the attendants were the brothers and sisters who, every body knew, were followers of the Lord, and for whom the blandishments of the world had no delight. The young and wayward did not come within the sound of his voice, and Mr. Seaver felt that he ought to leave his flock of ninety-and-nine and look for the

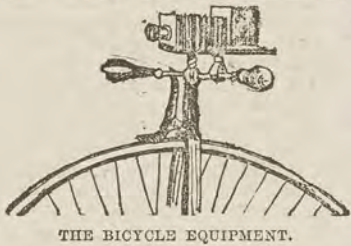
lamb that was lost. Through some fortunate circumstance he was induced to get a camera, and then followed hours of study and experiment. Before long he purchased a magic lantern, and one Sunday evening the good people were astonished to hear a sermon on Jonah and the whale, or some other equally interesting subject, with large pictures thrown upon a sheet illustrating the address. During the following week the illustrated sermon by Mr. Seaver became generally known, and the next Sunday evening, when the sexton took up the collection, he saw many new faces and the hat grew much heavier than the good brothers were wont to make it. So the weeks went by and the congregation continued to increase. Then a scarcity of hymn-books was complained of, and Mr. Seaver's next move was to use his lantern and cast the lamps upon the sheet where all could see. The singing improved and few books are now used, while the interest in Mr. Seaver's sermons does not wane and the church is crowded.

If there is one class of men more than another, however, who are frequently forced to rely on photography as their greatest help it is the officers of the law. To the Chicago Police Department it has proved valuable times without number. For the benefit of detectives and others where secrecy is necessary several cameras have been placed upon the market, the neatest, perhaps, of which is one that is worn under the vest. It is about seven inches in diameter, a little over an inch in thickness, and circular in form. The lens serves as a button, and it is operated by a string from the pocket. Six pictures may be made on a revolving plate. Of course, arranging the focus, drawing slides and such maneuvering are unnecessary and out of the question. Figures, facial expression, groups in action and all studies in animal life can instantly be taken. Another instrument, called the "detective camera," is carried in the hand



CONCEALED CAMERA. Like a valise, and is usually covered with leather. This camera is focused for objects at various measured distances, and the points are marked upon the index shown in the cut at the side of the box, the pointer of the index serving to act upon gear-work to bring the camera in adjustment for any given distance. The small lens in the upper left-hand corner serves to throw the picture on a piece of ground glass on the top of the camera, thus showing the position of the image on the plate. When the figure appears in proper position on this ground glass it is only necessary to touch the button on the right of the camera and the exposure of the plate is instantly made, its development being afterward accomplished in the ordinary manner.

By the use of these instruments officers can get an excellent picture of a man without his knowledge where they would not dare to take him to the room where ordinary rogues are photographed. The bankers also find these innocent-looking cameras of value in cases where a man arouses their suspicion. If a check is presented for payment and the signature looks shaky, while



THE BICYCLE EQUIPMENT.

the man is being questioned he is also posing for his picture. Thus the evil-doer is never safe, and never knows that his physiognomy is not familiar to the police.

A special instrument has also been made for the use of bicyclists, so that a man can get on his machine, take a spin of ten or twelve miles out into the country, and secure his views without being troubled with carrying a lot of luggage. Some of the finest amateur photographers in Chicago are wheelmen, among whom is Rev. Arthur Edwards, editor of the *Northwestern Christian Advocate*, who two or three years ago traveled through England and Scotland on a bicycle. Another is Mr. H. F. Fuller, who, with his sister—she upon a tricycle and he upon his wheel—went through Wisconsin last season taking views of the scenery. T. S. Miller, for three years President of the Chicago Bicycle Club; J. O. Blake, John Wilkinson, H. S. Maynard, and many other of the wheelmen of this city are also amateur experts with the camera.

There are several associations in Chicago devoted to the art. The Chicago Photographic Society, of which Prof. G. W.

The Sensation Collar Button.

SOLDERLESS

Composed of Two Pieces only, with fine Foil Stone Head.

A perfect imitation of a



Diamond Collar Button.

Is now offered to the trade in three sizes, Nos. 723, 724 and 924. Numbered illustrations above show EXACT size.

SENSATIONS also made in NINE sizes plain without stone.

HOWARD & SON,

102 ORANGE STREET.

PROVIDENCE, R. I.

We sell to Jobbers only.


We will on application furnish any retailer with names of jobbing houses carrying above goods. Mention KEYSTONE.

Have you seen the

14 K. 1-4 Gold Chain of

R. F. S. & Co.'s make?

THEY are warranted to wear TWENTY-FIVE YEARS, and are made in open curb trace and cable links. What use has any one for a solid gold chain that will soon have to be sold for old gold at a GREAT SACRIFICE, when for one-fourth of the money they can procure an article equally satisfactory?



Hough, of Dearborn University, is president, is composed of both professionals and amateurs. It has about sixty members. Meetings are held the first Tuesday in each month at the Art Institute, when lectures are given, followed by discussions of methods and appliances of photographic work. The Chicago Lantern Slide Club has a membership of forty, in which are both professionals and amateurs. Mr. E. D. Fisk is president. They make slides from their own negatives and give parlor entertainments at the houses of friends. It is an outgrowth of a professional society organized in 1879.

RINGS IN TREES.

Conclusions of General Interest Reached by the U. S. Forestry Department.

Mr. R. W. Furras, an agent of the United States Forestry Department, who has given much attention to the age of a tree as indicated by rings, as well as to the period at which trees of different species stop growing, and that which the wood is at its best, has reached some conclusions of general interest. He says: "Concentric or annual rings, which were once accepted as good legal evidence, fail, except where climate, soil, temperature, humidity, and all other surroundings, are regular and well-balanced. Otherwise they are mere guess work. The only region within my knowledge where either rings or measurements were reliable indications, are in the secluded, even, and regularly tempered valleys of the Southern Pacific coast."

Annual measurements of white-elm, catalpa, soft maple, sycamore, pig hickory, cottonwood, chestnut, box elder, honey locust, coffee tree, burr and white oak, black walnut, osage orange, white pine, red cedar, mulberry and yellow willow (nineteen species made in southeastern Nebraska) show that "annual growth is very irregular, some times scarcely perceptible and again quite large." And this he attributes to the difference in seasons. As trees increase in age inner rings decrease in size, sometimes almost disappearing. Diminishing rate of growth after a certain age is a rule. Of the four great beeches mentioned by Loudon, there were three, each about 17 feet in girth, whose ages were respectively 60, 102 and 200. Mr. Furras found 13 rings in a black locust 6 years old, 21 rings in a shell-bark hickory of 12 years, 10 rings in a pig hickory of six years, 11 rings in a wild-crab apple of 5 years, and only 20 rings in a chestnut oak of 24 years. An American chestnut of only 4 years had 9 rings, while a peach of 8 years had only 5 rings.—*Baptist Weekly*.

Early Consideration.

At the dinner-table. Little girl (addressing little brother)—Tommy, you musn't eat so much cake.

Visiting preacher (looking admiringly at the girl and then turning to the mother)—Madam, that is what I term consideration early developed. She is certainly a wise child, and you deserve credit for instilling into her the great virtue of abstaining from over indulgence in rich food. (To the girl)—And you do not want your brother to eat too much cake because you know it is not good for him?

Little girl—No, sir; because I don't want him to eat it all up, for I want some.—*Arkansas Traveler*.

Saw the Thing Through.

"How are you, Charley," said one traveling man to another in Philadelphia. "Where have you been?"

"Been visiting."

"Where?"

"In Washington."

"Indeed! I suppose you went all the rounds."

"You bet I did."

"Saw the capitol and went up into the Washington Monument, and all that sort of thing."

"Yes, and I was down in bed for two weeks with the malaria. Oh, I tell you, I didn't miss any of it."—*Merchant Traveler*.

Every Thing Booms.

"Gimme bre'kfas' an' I'll split yer ten sticks o' wood," said a tramp to a Sioux Falls lady as she came to the back door.

"No, sir; I won't do it unless you split twenty sticks."

"But yer uster gimme bre'kfas' for ten sticks."

"Can't help it; breakfasts have had a boom since you were here last. You split twenty or more on, else I'll untie the dog and come out with a kettle of hot water and scream for the police!"—*Dakota Bell*.

Mrs. A.—"I see you have got a newservant girl." Mrs. B.—"Yes, I make it a point to get a new one every month." Mrs. A.—"But that must be very inconvenient." Mrs. B.—"Yes; but there's nothing going on in this town that I don't know all about it."

"KIND words can never dye," as the gray headed old fellow remarked when some one spoke admiringly of his silver locks.