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CONTENTS

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NATIONAL GEOGRAPHIC SOCIETY

HUBBARD MEMORIAL HALL

SIXTEENTH AND M STREETS, WASHINGTON, D. C.

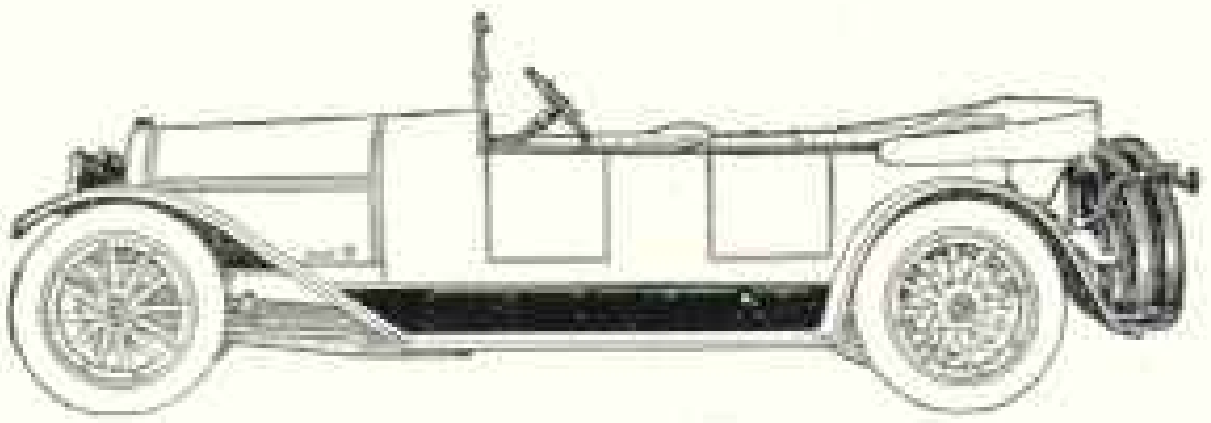
To carry out the purpose for which it was founded twenty-eight years ago, namely, "the increase and diffusion of geographic knowledge," the National Geographic Society publishes this Magazine. All receipts from the publication are invested in the Magazine itself or expended directly to promote geographic knowledge and the study of geography. Articles or photographs from members of the Society, or other friends, are desired. For material that the Society can use, adequate remuneration is made. Contributions should be accompanied by an addressed return envelope and postage, and be addressed:

GILBERT H. GROSVENOR, EDITOR

LOCOMOBILE

The building of the Locomobile is carried out on a rather restricted basis numerically.

Specializing on quality instead of quantity is an unvarying policy adopted years ago.



THE LOCOMOBILE COMPANY OF AMERICA

Makers of Fine Motor Cars

PRE NVMERO EXCELLENTIA

How I Improved My Memory In One Evening

The Amazing Experience of Victor Jones

"Of *course* I place you! Mr. Addison Sims of Seattle.

"If I remember correctly—and I *do* remember correctly—Mr. Burroughs, the lumberman, introduced me to you at the luncheon of the Seattle Rotary Club three years ago in May. This is a pleasure indeed! I haven't laid eyes on you since that day. How is the grain business? And how did that amalgamation work out?"

The assurance of the speaker—in the crowded corridor of the Hotel McAlpin—compelled me to turn and look at him, though I must say it is not my usual habit to "listen in" even in a hotel lobby.

"He is David M. Roth, the most famous memory expert in the United States," said my friend Kennedy, answering my question before I could get it out. "He will show you a lot more wonderful things than that, before the evening is over."

And he did.

As we went into the banquet room the toastmaster was introducing a long line of guests to Mr. Roth. I got in line and when it came my turn, Mr. Roth asked, "What are your initials, Mr. Jones, and your business connection and telephone number?" Why he asked this I learned later, when he picked out from the crowd the 50 men he had met two hours before and called each by name without a mistake. What is more, he named each man's business and telephone number, for good measure.

I won't tell you all the other amazing things this man did except to tell how he called back, without a minute's hesitation, long lists of numbers, bank clearings, prices, lot numbers, parcel post rates and anything else the guests had given him in rapid order.

* * * * * *

When I met Mr. Roth again—which you may be sure I did the first chance I got—he rather bowled me over by saying, in his quiet, modest way:

"There is nothing miraculous about my remembering anything I want to remember, whether it be names, faces, figures, facts or something I have read in a magazine.

"*You can do this just as easily as I do.* Anyone with an average mind can learn quickly to do exactly the same things which seem so miraculous when I do them.

"My own memory," continued Mr. Roth, "was originally very faulty. Yes it was—a really *poor* memory. On meeting a man I would lose his name in thirty seconds, while now there are probably 10,000 men and women in the United States, many of whom I have met but once, whose names I can call instantly on meeting them."

"That is all right for you, Mr. Roth," I interrupted, "you have given years to it. But how about me?"

"Mr. Jones," he replied, "I can teach you the secret of a good memory in one evening. This is not a guess, because I have done it with thousands of pupils. In the first of seven simple lessons which I have prepared for home study, I show you the basic principle of my whole system and you will find it—not hard work as you might fear—but just like playing a fascinating game. I will prove it to you."

He didn't have to prove it. His Course did; I got it the very next day from his publishers, the Independent Corporation.

When I tackled the first lesson, I suppose I was the most surprised man in forty-eight states to find that I had learned in about one hour—how to remember a list of one hundred words so that I could call them off forward and back without a single mistake.

That first lesson *stuck*. And so did the other six.

Read this letter from C. Louis Allen, who at 32 years became president of a million dollar corporation, the Pyrene Manufacturing Company of New York, makers of the famous fire extinguisher:

> "Now that the Roth Memory Course is finished, I want to tell you how much I have enjoyed the study of this most fascinating subject. Usually these courses involve a great deal of drudgery, but this has been nothing but pure *pleasure* all the way through. I have derived much benefit from taking the course of instruction and feel that I shall continue to strengthen my memory. That is the best part of it. I shall be glad of an opportunity to recommend your work to my friends."

Mr. Allen didn't put it a bit too strong. The Roth Course is priceless! I can absolutely *count* on my memory now. I can call the name of most any man I have met before—and I am getting better all the time. I can remember any figures I wish to remember. Telephone numbers come to mind instantly, once I have filed them by Mr. Roth's easy method. Street addresses are just as easy.

The old fear of forgetting (you know what that is) has vanished. I used to be "scared stiff" on my feet—because I wasn't *sure*. I couldn't remember what I wanted to say.

Now I am sure of myself, and confident and "easy as an old shoe" when I get on my feet at the club, or at a banquet, or in a business meeting, or in any social gathering.

Perhaps the most enjoyable part of it all is that I have become a good conversationalist—and I used to be as silent as a sphinx when I got into a crowd of people who knew things.

Now I can call up like a flash of lightning most any fact I want right at the instant I need it most. I used to think a "hair trigger" memory belonged only to the prodigy and genius. Now I see that every man of us has that kind of a memory if he only knows *how* to make it work right.

I tell you it is a wonderful thing, after groping around in the dark for so many years to be able to switch the big search-light on your mind and see instantly everything you want to remember.

This Roth Course will do wonders in your office.

Since we took it up you never hear anyone in *our* office say "I guess" or "I think it was about so much" or "I forget that right now" or "I can't remember" or "I must look up his name." Now they are right there with the answer—like a shot.

Have you ever heard of "Multigraph" Smith? Real name H. O. Smith, Division Manager of the Multigraph Sales Company, Ltd., in Montreal. Here is just a bit from a letter of his that I saw last week:

> "Here is the whole thing in a nutshell: Mr. Roth has a most remarkable Memory Course. It is simple, and easy as falling off a log. Yet with one hour a day of practice anyone—I don't care who he is—can improve his Memory 100% in a week and 1,000% in six months."

My advice to you is don't wait another minute. Send to Independent Corporation for Mr. Roth's amazing course and see what a wonderful memory you have got. Your dividends in *increased earning power* will be enormous.

VICTOR JONES

Send No Money

So confident is the Independent Corporation, the publishers of the Roth Memory Course, that once you have an opportunity to see in your own home how easy it is to double, yes, triple your memory power in a few short hours, that they are willing to send the course on free examination.

Don't send any money. Merely mail the coupon or write a letter and the complete course will be sent, all charges prepaid, at once. If you are not entirely satisfied send it back any time within five days after you receive it and you will owe nothing.

On the other hand, if you are as pleased as are the thousands of other men and women who have used the course send only $5 in full payment. You take no risk and you have everything to gain, so mail the coupon now before this remarkable offer is withdrawn.

FREE EXAMINATION COUPON

Independent Corporation

Division of Business Education,
Dept. 558, 119 West 40th St., New York

Publishers of The Independent, "The Most Satisfactory War Journal in America."

Please send me the Roth Memory Course of seven lessons. I will either remail the course to you within five days after its receipt or send you $5.

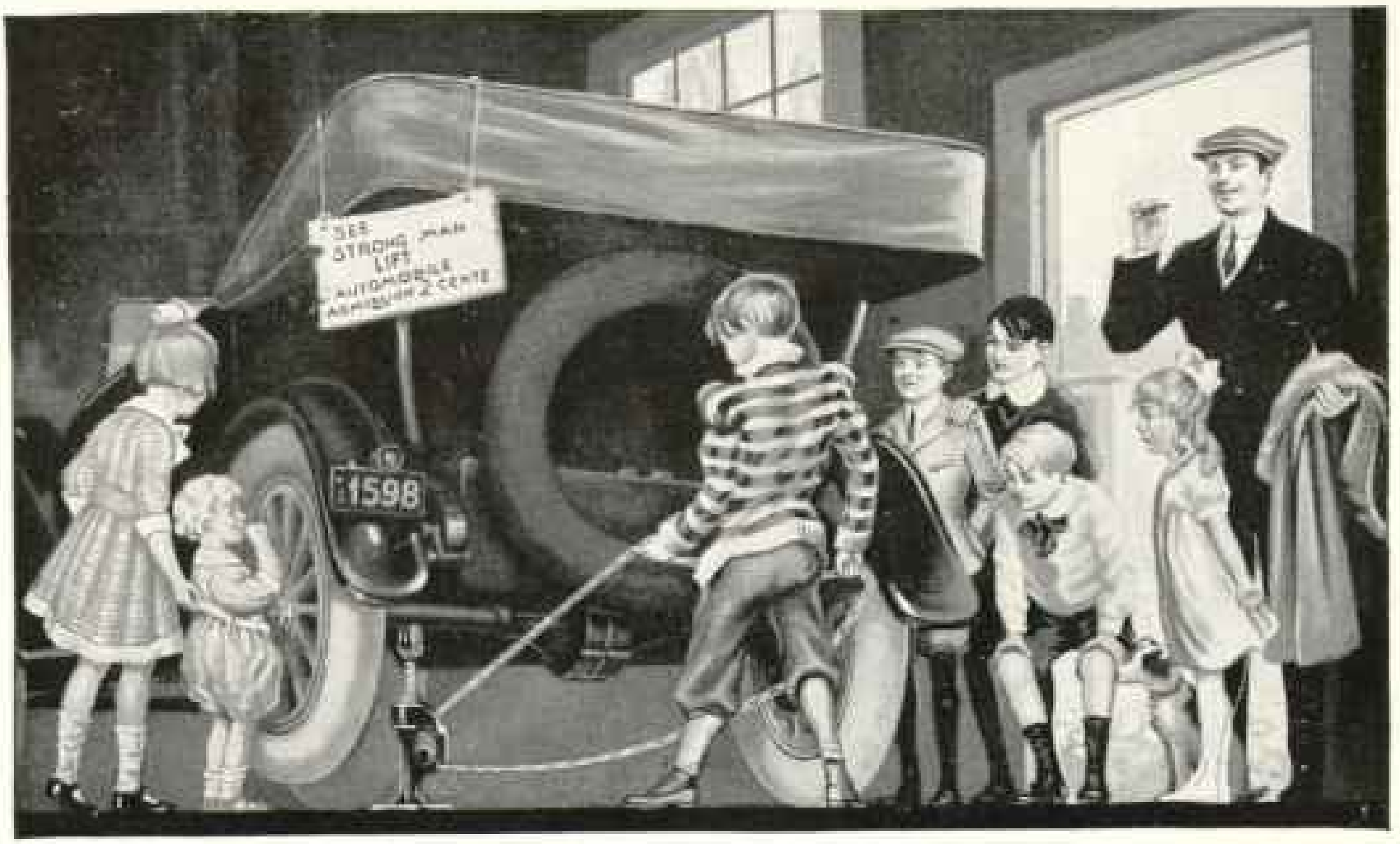
Name.....

Address.....

.....

.....

Nat. Geog. 8-18



It's Child's Play

to raise or lower a car with the

Weed Chain-Jack

To lift a car with the Weed Chain-Jack, simply give a few easy pulls on its endless chain while you stand erect—clear from springs, tire carriers and other projections. ***To lower a car*** pull the chain in opposite direction.

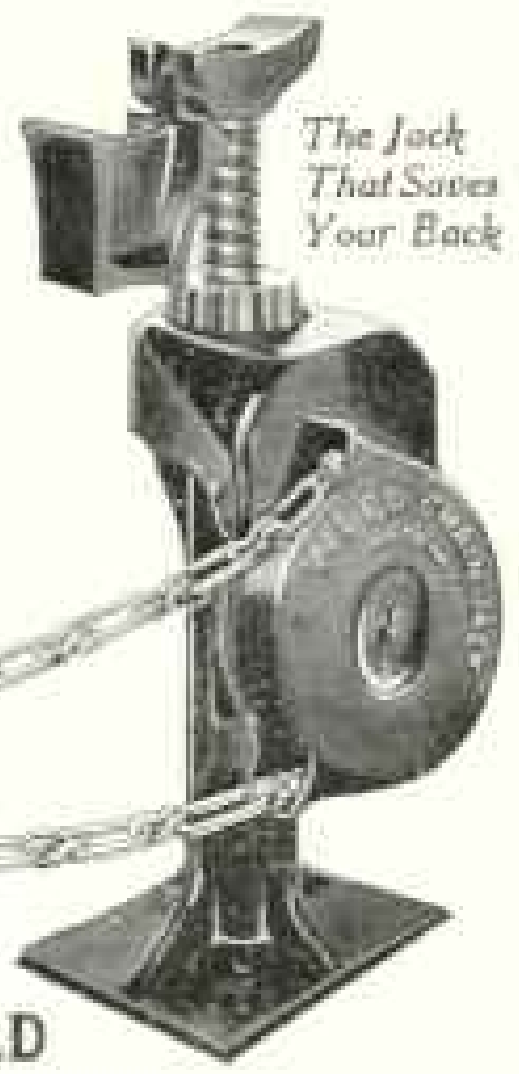
10 Days' Trial

If your dealer does not have them, send $7.50 for any size for passenger cars, or $15.00 for the Truck size, and we will send you one, all charges prepaid. For delivery in Canada send $8.50 for any size for passenger cars or $16.00 for the Truck size. Try it 10 days. If not satisfied, return it to us and we will refund your money.

MADE IN FOUR SIZES

SIZE	Height When Lowered	Height When Raised	Height When Raised With Aux. Step Up	Price
8 inch	8 inches	12 1-2 inches	14 1-2 inches	$7.50
10 inch	10 inches	15 3-4 inches	17 3-4 inches	7.50
12 inch	12 inches	19 1-2 inches	No Aux. Step	7.50
12 in. Truck	12 inches	23 1-4 inches	No Aux. Step	15.00

The 8 inch and 10 inch sizes are made with an auxiliary step as illustrated. When in operative position this step adds two inches to the height of the jack.



The Jack That Saves Your Back

AMERICAN CHAIN COMPANY, Inc.
Bridgeport, Connecticut.
In Canada—DOMINION CHAIN CO., Ltd., Niagara Falls, Ontario
LARGEST CHAIN MANUFACTURERS IN THE WORLD

Save the *Thoughtless* Dollars

"I got the sweetest hat today. And, my dear, of course, I didn't really need it, but—"

* * * *

"What if it is only a few blocks? Here, taxi!"

* * * *

"I know I'd feel a lot better if I ate less, but I simply must have a big order of—"

* * * *

Over there in the Picardy mud, pock-marked with significant craters and "plum-caked" with unspeakable things that once were men, our soldiers can't hear all that some of us are saying. Good that they can't, isn't it? It wouldn't make it any easier to stand firm against those blood-crazed, grey hordes who come on wave after wave because they believe their Kaiser is "God's anointed shepherd of the German people."

* * * *

It isn't that we Americans are a selfish people. We have simply been thoughtless.

Money is needed to win this war—let's give it. So far, we have been asked only to lend—to lend at a good round 4% interest. Turn your THOUGHTLESS dollars into War Savings Stamps.

NATIONAL WAR SAVINGS COMMITTEE,
WASHINGTON

W.S.S.
WAR SAVINGS STAMPS
ISSUED BY THE
UNITED STATES
GOVERNMENT

Contributed through Division of Advertising *United States Committee on Public Information*

This space contributed for the Winning of the War by

SWIFT & COMPANY, U. S. A.

Not Nut Meats

Those Are Corn Puffs

Think of a grain food so enticing that folks use it as confections.

They do that with Puffed Grains—use them in candy-making—scatter them on ice cream.

And they eat them like peanuts—sometimes doused with a little melted butter.

Bubbled Grain Foods

The latest Puffed Grain comes from corn hearts, steam exploded—puffed to raindrop size.

Sweet pellets of hominy are thus puffed to airy, toasted bubbles.

Corn Puffs are vastly different from Puffed Wheat or Puffed Rice. But they are also shot from guns. Every food cell is exploded. They come to you as flimsy globules, thin and flavory—most delightful morsels.

Let children enjoy them—all day long, at meal-time and between meals.

They are ideal foods, easy to digest; and they taste like fairy tidbits.

Puffed grains are the joy of millions in these summer days.

Food Confections

Buttered or salted, like peanuts or popcorn, Corn Puffs are confections. Eat them dry.

Or, lightly butter and crisp them before adding sugar and cream, and you'll multiply the flavor. (1947)

Corn Puffs **Puffed Rice** **Puffed Wheat**

All Bubble Grains
Each 15c Except in Far West

HERCULES POWDER CO.

Backing The Fighter

Back of our fighting man in France stands the mechanic who labors in our factories and munition plants. Back of the mechanic stands the miner whose broad back bends to his task in the dark heart of some mountain. And back of the miner stands the power of explosives, loosening the grip of Mother Earth on her wealth of metals and minerals.

Without the gigantic force of explosives it would be utterly impossible for us to produce in sufficient quantities the munitions to supply our armies over there; the steel to build our battleships; the coal whose latent energy turns the wheels of our great manufacturing plants; the copper which goes to make our dynamos, cables, and shell casings; the gold which helps us carry the great financial burden of the war.

The Hercules Powder Co. is supplying a very large proportion of the explosives used by American miners, to whose patriotic labor is due, in no small degree, our present vast production of the materials of war.

HERCULES POWDER CO.

Chicago — Duluth — Wilmington, Del. — Joplin — Pittsburg, Kan. — Pittsburgh, Pa. — Memphis — New York — Salt Lake City — San Francisco — St. Louis — Weehawken, N.J.

Municipal Bonds
in
War Times

During the war period only such new financing will be permitted as in the judgment of the Government is necessary.

Municipal expenditures are, therefore, not being made except for essential community needs.

This is resulting in a growing scarcity of Municipal Bonds.

Our current list contains offerings of leading cities at attractive prices.

Send for list N-8 of issues yielding from 4½% to 6% and exempt from all Federal Income Taxes.

William R. Compton Co.

Government and Municipal Bonds
"Over a Quarter Century in This Business"

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105 So. La Salle Street

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PITTSBURGH: Farmers Bank Building
JACKSON, Mississippi

THE NATIONAL CITY COMPANY
NATIONAL CITY BANK BUILDING
NEW YORK

Analysis of Liberty Bond Issues

WE HAVE prepared for the use of investors a concise comparison of the several issues of Liberty Bonds.

The table shows the yields and essential details of the six issues outstanding.

A copy will be sent upon request for AN-86.

The National City Company

National City Bank Building, New York

Correspondent Offices in 31 Cities

Bonds ***Short Term Notes*** ***Acceptances***

War-Tested 6% Investments

THE first mortgage 6% serial bonds, safeguarded under the *Straus Plan* have stood the test of four years of the world war as they stood the test of unsettled conditions in other years. They have again proved their already proven soundness.

We are now offering a well-diversified list of well secured bonds to net 6%, in $100, $500 and $1,000 denominations, maturing in two to ten years.

Write for our current offerings, and our booklet, "Safety and 6%". Ask for

Circular No. H-808

S.W. STRAUS & CO.

Established 1882 — Incorporated
NEW YORK, 150 Broadway — CHICAGO, Straus Building
Detroit, Philadelphia, Minneapolis, San Francisco, Kansas City

35 years without loss to any investor

ESTABLISHED 1865

$80 Return In One Year from Investment of $980

Security is developed water power and newspaper manufacturing plant of large worth and established earnings.

We have available for August funds this and other safe, profitable investments of varying maturities and yielding 6% to 8¼ %.

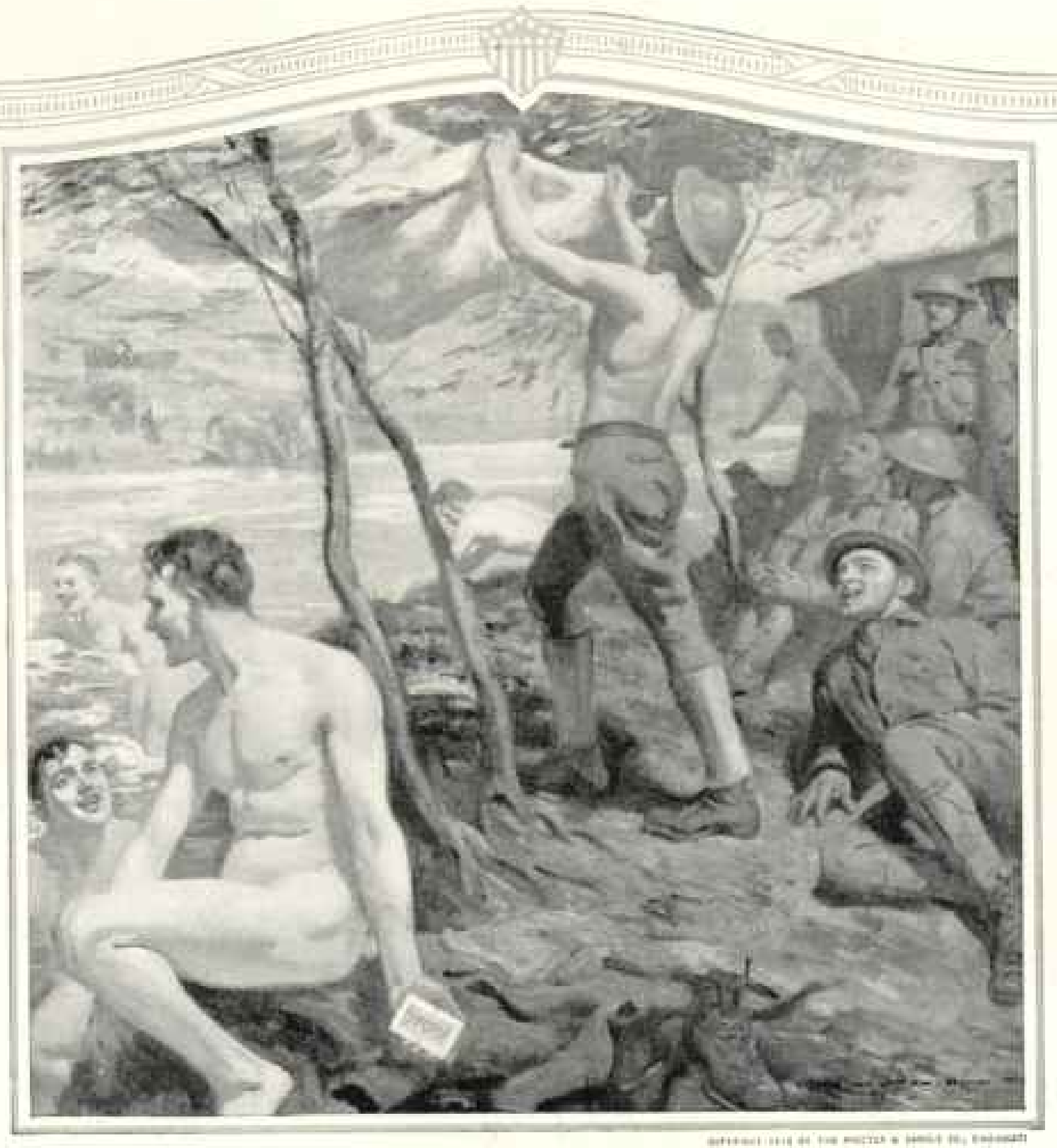
All are secured by industries vitally essential to our national welfare. Present market conditions permit such exceptional offerings.

Bonds of $500 and $1,000 denominations.

Write for Circular No. 1012-D

Peabody, Houghteling & Co.

(ESTABLISHED 1865)
10 South La Salle Street, Chicago



IVORY SOAP follows the flag. Wherever America goes, it is "among those present." Ivory's use is as unchangeable a part of American life as the practice of cleanliness. Ivory Soap is, in fact, the very joy of living to Our Boys when they are relieved from the front lines for rest, recreation, clean clothes and a bath.

IVORY SOAP. IT FLOATS . 99 44/100 % PURE

VOL. XXXIV, No. 2 WASHINGTON AUGUST, 1918

THE NATIONAL GEOGRAPHIC MAGAZINE

BRINGING THE WORLD TO OUR FOREIGN-LANGUAGE SOLDIERS

How a Military Training Camp is Solving a Seemingly Unsurmountable Problem by Using the Geographic

By CHRISTINA KRYSTO*

THIS is a story of adventure. We know that this is so, because when the word adventure came up in class for definition some days ago the mild-eyed Norwegian on the end of the bench said, thoughtfully, in his uncertain English, "Adventure is something new and we like it."

Teaching English to the foreign soldiers here in Camp Kearny, California, is new and we like it. We like it even when we have to write our spelling words on planks because there are no blackboards; we like it even when a major and a captain together come to visit our classes just as we are calling on our dullest pupil; we do not lose faith even when those classes are taken from us in a body and put on dire "K. P.," and we are left, with a beautifully prepared lesson and sometimes a whole piece of chalk, pilfered somewhere, to stare at empty benches.

* Miss Krysto, a member of the staff of the Bureau of Immigrant Education, of the State Commission of Immigration and Housing, of California, was designated by this organization to assist the United States Government in the education of foreign-language soldiers at Camp Kearny. In the following article she tells how this work was pursued.

To be sure, we were properly launched in the work. Other camps might boast of a better school organization, of a better teaching force—might easily boast of better equipment. But to Camp Kearny belongs the distinction of having had the shortest, most comprehensive, and—taking into account its aim and purpose—the most successful normal course in the teaching of English to foreigners which has ever been given in any camp or—we think we are safe in asserting it—anywhere else in America.

A SIX-WEEKS' COURSE IN THREE DAYS

Camp Kearny detailed its teachers to teach even as it detailed its pupils to learn; and then, through the efforts of the Commission of Immigration and Housing of California, the only woman who — to quote herself — was "mad enough to try the thing" came down to camp and, with just three days at her disposal, gave her six-weeks' normal course.

It was an attempt which was destined from the start to fail and which succeeded, as such things sometimes succeed when one is "mad" enough to try them.

The Superintendent of Immigrant Edu-

cation in Los Angeles, Miss Ruby Baughman, may forget many things among the thousands with which she must charge her mind, yet she will never forget the roomful of sergeants, corporals, and privates, detailed to teach, who sat through her lectures four hours of each day for three days, and every day at the end of the four hours had to be ordered from the room because they would not leave voluntarily!

In their turn those sergeants, corporals, and privates will not forget the clear-featured, clear-eyed woman who talked to them through all those hours and laid before them, in all its hopeless intricacies and with all its unending heartaches, the entire foreign problem of the American Army.

No one knew how she did it; perhaps she herself did not quite know. She talked of school-rooms and lessons and methods of approach. She taught, somehow, the story of the foreigner. Men who would have left the room had she tried by a word to convert them stayed and were won over to her faith.

THE MISSION OF THE KHAKI-CLAD TEACHERS

Normal course—always the words will mean just this to us: a low-ceilinged, stuffy room, with the merciless glare from the hot world beating against the windows, the ceaseless droning of a graphophone in the adjoining hall, the continuous rumble of heavy wagons on the paved road just outside the door, the strangely mournful clatter of cavalry trotting past. And, above it all, a great truth being told, the truth of silent suffering or, worse still, the apathy which follows upon suffering on the part of those who have ears and cannot hear, who have tongues and yet are dumb, who understand neither the commands of their officers nor the chatter of their mess companions, who do not know why they are, where they are, and what it is all about.

Between these men of foreign tongue—the silent, discouraged horde—and enlightenment stands that roomful of khaki-clad men—sergeants, corporals, and privates detailed to teach.

Something very fine rose and grew in that room in those three days—something which found expression two weeks later in the glowing plans of two of the teachers who had been ordered to France. Eager to go, triumphant, they still found time to plan—not any glory for themselves, not any heroic deeds, but a school "over there" for the non-English-speaking soldiers who might be within their reach when they were "settled" overseas. To hope that their plans will find substance is, perhaps, to put an impossible strain upon the nature of soldiers of 19 and 20, and yet we are awaiting with impatience our first letters from France.

PROBLEMS OF QUARTERS AND HOURS

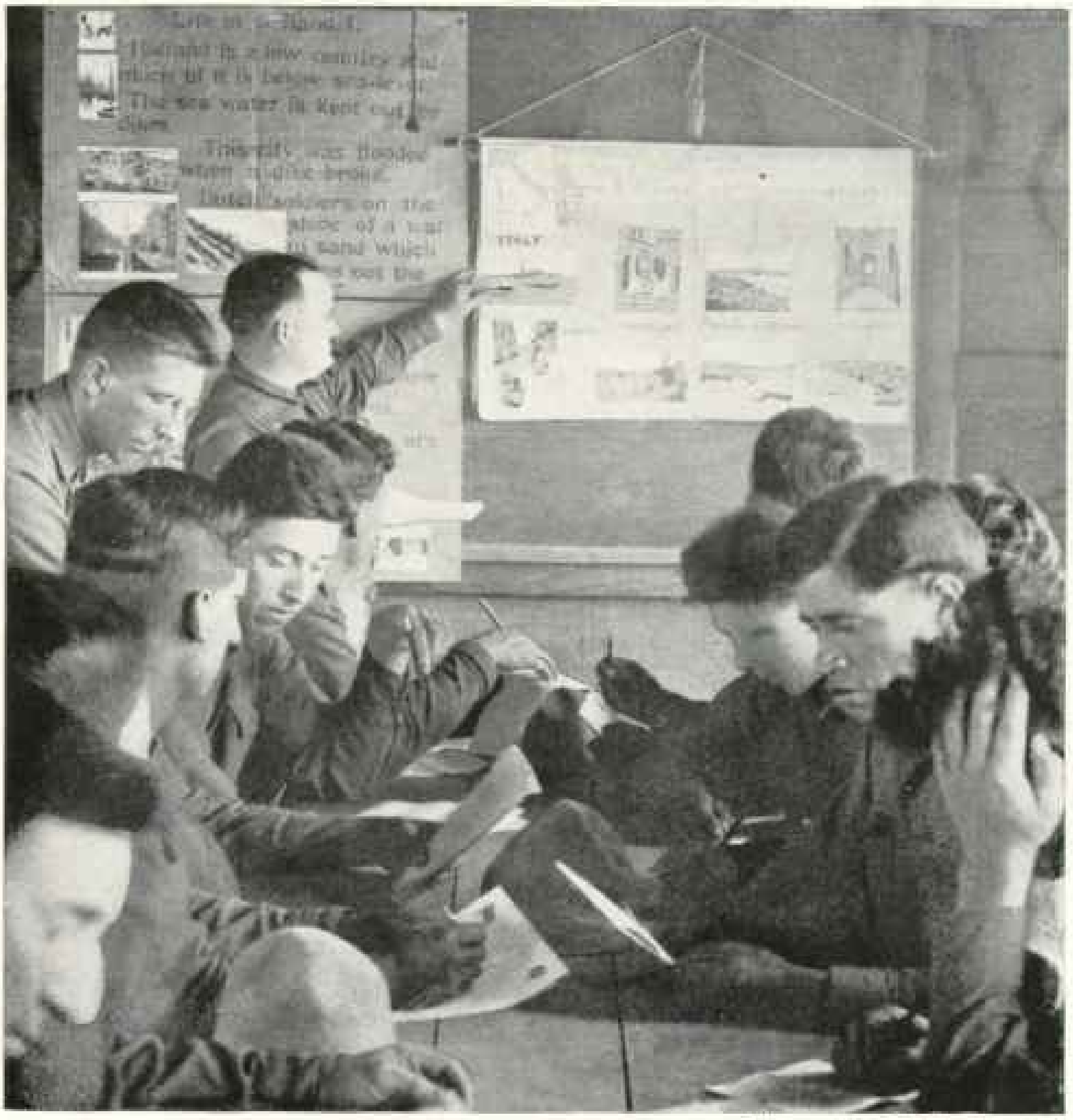
All too soon the three days had gone; normal school closed its doors; Miss Baughman left us to our fate, and we, the khaki-clad roomful of "permanents" and a few outsiders who were given the privilege of assisting, scattered through the various units of the huge, sun-baked, dusty camp and took stock of our surroundings.

Quarters? The Y. M. C. A. lecture halls, with the eternal graphophone grinding in the next room; dim, empty mess-halls, and, out at the remount station offices, a saddle shop the door of which somebody was forever forgetting to unlock on time.

Hours? Classes met after supper, the men dull and tired after a day of trench digging and drill and scorching sun; the classes met in the afternoon unless other duties interfered, and other duties, it seemed, were always calling.

In some of the units, through the tireless efforts of the chaplains, the learning of English was put on an equal basis with drill, and men marched into the mess-halls, cheerful and alert, ready for this extra branch of soldiering; and we wondered, as we talked with these chaplains, whether they knew how thoroughly fraught with importance was their work of pioneering.

Equipment? Here and there a blackboard; here and there a piece of chalk, an eraser, wrapping paper for notebooks; for the most part a few long benches, a table, the teacher's two bare hands, and that intangible something which had had its beginning in those first



Photograph by Christina Krysto

"IN THE HANDS OF A COMPETENT TEACHER, THE CHART BECOMES AN INEXHAUSTIBLE SOURCE OF INFORMATION"

Without photographs the study of geography in connection with the war would be a difficult matter for men who have not learned the trick of imagination

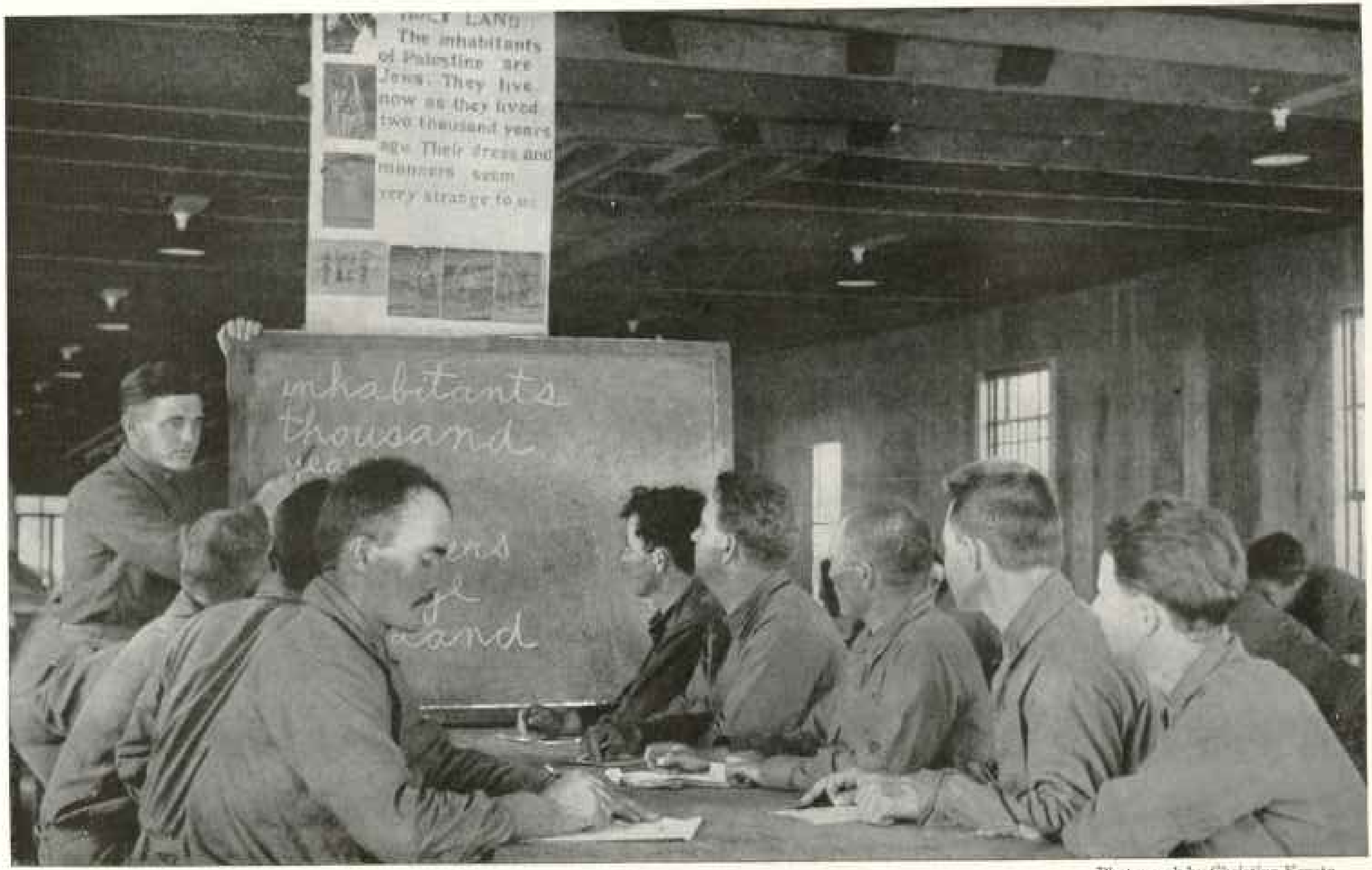
three days and which took from the camp classes the taint of the "Mex" and the "Wop" and the "Squarehead" and made them all plain fellow-men—Americans. Is it not, after all, a little strange to speak of *foreigners* in the American Army?

PATHETIC INADEQUACY OF PRIMARY TEXT-BOOKS

But we could not teach on that alone. We looked through the supply of books to be had, the discarded readers of public schools, and we put them back into their boxes. First-grade readers! We had visions of six-foot Juan Lopez intoning,

"Run with me
To the tree,"

while he ached for a fuller understanding of "tent," and "rifle," and "guard," and "bayonet." We could hear our advanced pupil, Gus Nelson, trying to satisfy his



Photograph by Christina Krysto

"THE PALESTINE CHART, MADE FROM THE GEOGRAPHIC, WAS A JOY TO MAKE AND A JOY TO TEACH"

Often, though not always, the teacher of the same nationality as the class finds a readier response from the pupils. The young Italian in this photograph welded his Italian class at the base hospital into a friendly unit, of which he was very definitely the center.

Photograph by Christina Krysto

AFTER A CLASS OF FOREIGN-LANGUAGE SOLDIERS HAS BECOME THOROUGHLY FAMILIAR WITH THE CHARTS MADE FROM THE PICTURES OF THE NATIONAL GEOGRAPHICS, IT IS READY TO TRY THE MAGAZINE ITSELF

Among the issues of the Geographic in which these boys in khaki are engrossed, there may be identified one of the Bird numbers, the Aviation number, and the Flag number

craving for a knowledge of aëroplanes with the story of Aladdin's lamp. We wondered where those paper-bound pamphlets of fables and myths would fit in.

We reached joyfully for the histories and found them built about the tales of the Crusades. One world map,—that was a glorious find—one world map upon which to build our empire!

To be sure, as time went on we found use even for Aladdin's lamp and sent for more discarded Fourth Readers. But that was when we ourselves discovered the connection between that lamp and aëroplanes. At the start we set about the manufacturing of our own "books."

Charts were not new to us. Standardized Peter Roberts charts and leaflets, dealing with military terms, camp etiquette, the care of the clothing, could be had ready made and were excellent. Lessons based on the vocabulary of the General Orders,—some day perhaps a tragedy will be written on the non-English-speaking soldier and his General Orders—these, too, had their place. But they were not enough.

FIRST STEP—CONVERSATION

All beginning lessons of immigrant education must center about conversation. Much as he longs for the book and easily as he learns to read, the foreigner, whether in military camp or factory, needs, first of all, to understand and to be understood.

There is nothing more difficult than to make a foreign pupil *talk*, for the courage which is his when his hands grasp a book and his eyes are glued to its page forsakes him when hands and eyes lose their support. And between straight reading and straight speaking comes the picture chart.

The subject-matter for beginners' charts centered about such words as "gun," "shoot," "soldier," "officer," "march," "drill," "tent," "eat," "run," "hear," "see," and we thought that they would be easy to make until we tried to find appropriate pictures for our illustrations. The "intermediate" charts were easier, and they were determined by a few brief questions in class.

We take so easily for granted the soldier's—any soldier's—knowledge of the tools of warfare. We somehow believe that even though he has neither newspapers nor magazines, neither lectures nor casual war conversation, he still, by virtue of his months in a military camp, acquires military information through the pores of the skin, as it were. Which is true perhaps of the care of his gun and the hours for mess.

THEY LACK PRIMARY CONCEPTIONS

What is a tank? What is a submarine? What is a howitzer? Out of what are aëroplanes made? What is a transport? What is a destroyer? What is Red Cross? It is not that many of these foreign soldiers lack the English words to tell us. There is no concept of the things themselves.

We gathered photographs and more photographs from the magazines in the camp library store-room. We procured huge sheets of wrapping paper. With these and with a stamping press, and scissors, and inkpads, and glue we made our charts—the tank and the aëroplane and the ships in the process of construction, at rest, in action, with appropriate words and legends printed under the photographs. All these were, primarily, for the less advanced classes, though we who made them gathered much new knowledge as we worked.

"HOW DO WE GO TO FRANCE?"

The geographic charts came later. It was Corporal Pickett who raised the question. Corporal Pickett—he is *Private* Pickett now, for he learned that only privates were wanted for the last contingent which went across—taught a class in the 160th which met in the evenings stupid with weariness. Truly, this class needed a bright and stirring lesson. The magic word "France" was in the air, and Corporal Pickett asked a question, thinking of a lesson in transportation:

"How do we go to France?"

The class, to a man, looked him over indifferently and said no word.

"Aw, come on now, fellows; how do we go to France?" A very baffled teacher he was, face sunblistered, hair upstanding, despair in his eyes. "José Cano, don't you know how we go to France?"

"We go," said José Cano, laboriously, "on train. Bimeby, maybe, we walk."

Those men left for France the following week.

"FROM NEW MEXICO TO THE UNITED STATES"

We held a council of war that evening. A fellow-teacher from the remount station joined us, coming with the light of a stupendous discovery in his face.

"What do you think I've run across?"

We could not guess.

"Romero was having a time with his words. I asked him how long he had been in the United States.

"'Seven months,' he said.

"'How long in Camp Kearny?'

"'Seven months.'

"'Where did you live before that?'

"'Mexico.'

"I don't know what made me ask the next question:

"'*Old* Mexico?'

"'No, New Mexico.'"

In New Mexico all his life, in the United States seven months! An American citizen by virtue of his birthplace, and America to him was a military camp set in the middle of a desert!

Later we ceased to be astounded. There were many from New Mexico. And we found not a few among them who, when they left New Mexico, came to the United States.

So the geographic charts really had to be, and, much as the beginners liked them, it was among the more advanced classes that they found their true appreciation.

When war is so much a matter of geography, it is inconceivable that a lecture or recreation room in any camp building can be considered even partially equipped without a world map on the wall.

However determined and loyal a soldier may be, it is hard for him to wax enthusiastic over a war which is being waged somewhere off in space. And it is no less difficult for him to have a notion of the part which various countries have played and are playing in this war unless he knows something of the countries themselves. "Allies" is, at best, a hazy word, unless one can tie it down to some sort of a picture or a printed page.

THE RAID ON THE GEOGRAPHICS

Back in the camp library, scissors in hand, we smiled our way past the dubious librarian and slipped into the alluring store-room.

"Anything but the NATIONAL GEOGRAPHIC MAGAZINES," he cautioned.

"Nothing *but* the GEOGRAPHICS," we assured him, and held firmly to our point.

Belgium, France and Italy, England and Holland, Mexico and the British Empire—we made charts on all of these and then found Palestine, and the Palestine series was a joy to make and a joy to teach. The rich, glowing colors of the illustrations, the stirring appeal of the recent Jerusalem campaign—nothing but the initial stand of Belgium touched those classes as did the war story of the Holy Land.

THE NORTH AMERICAN MAMMALS NUMBER

Presently we deviated from our geographic path. We came upon the North American Mammals number of the magazine.

It took us long to make the three charts which exhausted those pictures. Over the bears, especially, we lingered, with our fingers in the gluepot. We rather expected a cheerful welcome for that chart, but the shout of joy from our most stolid beginners surpassed our greatest hopes.

"Little white baby swim," said Pablo Moreno, cautiously enunciating his words, as he stared at the tiny Polar bear which was being towed by the mother.

"Big brown bear look under rock for lizar'," added Pedro Ramirez, not to be outdone. It was an unexpected sentence, and yet, who knows, perhaps that is just what the big brown bear is looking for.

The chart on trees was hardly less effective, especially at the remount station, which very soon will be the Paradise of the camp, because its major believes that trees are the beautifiers of the earth, and acts upon his belief. The remount soldiers may not know how to dig trenches, but surely holes for trees have no terrors for them. With the photographs of the giant redwoods we combined those of forest fire and let the class draw its own

Photograph by Christina Krysto

THEY TEACH OUR FOREIGN-LANGUAGE SOLDIERS BY USING UNIVERSAL LANGUAGE CHARTS—PICTURES

A squad of Camp Kearny soldiers who absorbed a six weeks' normal school course in three days and then put their knowledge into practice with the aid of picture text-books made from copies of the NATIONAL GEOGRAPHIC MAGAZINE

conclusions, which it did, quite satisfactorily, as follows:

"Big fire start with cigar; we fight with wet sacks."

HOW THE PICTURE CHARTS ARE USED

Left to themselves, the pupils read the legends stamped under the photographs, look at the photographs themselves, and clamor for another chart. But in the hands of a competent teacher, the chart becomes an inexhaustible source of information. Tacked up on the wall beside a map, it gives use to an endless conversation, whenever the teacher insists that the answers to his questions be given in full.

"Where is Holland?"

"What are the countries around it?"

"What do we call the people of Holland?"

"Is Holland at war?"

"What are the products of Holland?"

"Why would she be an important ally?"

"What is meant by 'below sea-level'?"

"How are Holland's low fields protected?"

"What happens when a dike breaks?"

"How could dikes be used in warfare?"

"What did the Belgians do with their dikes when the Germans overran the Belgian lowlands?"

"If Holland is neutral, why do we see so many cannons in the photograph?"

"What other country uses dogs to pull loads?"

The list of questions is without end. Most of the answers are found in the photographs attached; some come from the map; some rise unexpectedly out of a bit of vague, half forgotten information; still others have to be supplied by the teacher.

At first glance, the questions may appear difficult. One would suppose that men who could answer them were in no need of immediate instruction. But the weakness of those "advanced" classes lies just here; that the men who understand fairly well talk haltingly, timidly, with countless errors of pronunciation and sentence structure. Yet their minds, in their native language, if one may use the term, are reaching out for a fuller understanding of the war itself, and the craving must be satisfied.

THE CHART OF THE UNITED STATES

We waited for a time before making a chart of the United States, though we held our photographs in readiness. Perhaps we were beginning at the wrong end when we taught the countries of Europe first; and yet Camp Kearny is already a part of the war and the war is in France. But when Mr. Olsen, of that "crack" class which holds three Mexicans, two Italians, one Greek, one Austrian, one Pole, one Russian, one Dane, and Mr. Olsen, asked for a chart of America, we had it ready for the next afternoon.

It was a chart from which might be taught a lesson of the opportunities offered by the United States. A city street there was, and several factories, a model farm, a railroad through a seemingly hopeless ravine, an artificial lake, Niagara Falls—queerly enough not one of the class had ever heard of Niagara Falls—the redwoods of California, the jungles of Florida, the snows of the North.

They had a good time with that chart. They peopled the office buildings with professional and business men, they built the dam from canyon wall to canyon wall, they quarreled over the railroad bed. We discovered that "in the old country" our Polish friend had tried his hand at engineering, that Mr. Pappas had once walked from one end of Florida to the other, seeing "many snakes, long and some short"; that Señor Luna's brother had recently struck gold on the slopes of a desert mountain in Arizona.

Not many questions were needed that afternoon to stimulate conversation. And when the hour came to an end, the excited Lipnitzky was quarreling with Señor Chavez over the advantages of turbine wheels and getting the best of the argument.

THE MEXICAN AND THE ITALIAN PUPIL COMPARED

It is customary to believe that the Mexican is indifferent to learning English and the Italian is eager for the opportunity, yet some of the finest pupils in Camp Kearny are Mexicans. The difference lies chiefly in the method of attack.

The Mexican, quite unconsciously, plays at indifference, yet is disappointed

if the lesson is not thrust upon him. The Italian reaches out for information. A Mexican, in studying a chart, will answer stolidly and reluctantly, and then, after class, will stand long and thoughtfully before it. An Italian begins to talk before the chart is really in place and, given a chart of Italy and an Italian class, the passers-by out in the street will stop to listen to the result.

The question of who learns the more quickly is easily answered. But we cannot dispose so easily of the question which deals with the wish to learn.

And, indeed, after a very few days with our charges, we stopped wondering whether or not the foreigner wants to learn his English. The terrible pity of it is that we do not always realize in time just how *much* he wants to learn.

There was a man out at the remount station who was pointed out to us as sulky and indifferent. "The typical Mexican," so the introduction ran. The teacher took him in hand. He was coaxed and prodded and "encouraged" for days, and with each lesson grew more silent, less responsive, more ill at ease.

And then one day, when a question too many had been hurled at him, suddenly and without warning,—unless one choose to take as warning his "stubbornness," his "unresponsiveness," his "stupidity"—his head went down into his arms. And in the silence which followed, as pupils and teacher looked away from his shaking shoulders, there rose a dreadful accusation, which reached far beyond the boundaries of Camp Kearny.

It was, after all, very simple. The class was getting away from him: he could not keep up with the work and he felt himself being left behind. He, too, had come from New Mexico into the United States.

After the War

After the war, whatever else may be, the world will become a smaller place. Geography will become a more friendly, more intimate thing, more closely connected with the every-day opportunities of man.

In those opportunities the foreigner at home will have a share; the "foreign" soldier will come "home" to them. Whatever aid he may be given now toward a better understanding of the world as a whole will not be lost, especially when in learning of the world he learns to speak the English language a little more readily.

And so we are glad we found on that evening, in the store-room of the camp library, the pile of the GEOGRAPHICS.

RECENT OBSERVATIONS IN ALBANIA

By Brig. Gen. George P. Scriven, U. S. Army

OF THE country in general, it may be said that Albania, as delimited by the maps existing before the war, is now under control of the Germans, the Austrians, and the Bulgars to the north of the latitude of Berat and the lakes, and under control of the French and the Italian troops to the south. The Greeks as yet have no control within the boundaries established by the Conference of London, while the English and the Serb theaters of operations lie in Macedonia.

The western part of southern Albania (soon perhaps all of west Albania, if the present Italian success carries on) is the more important section on account of the richness of the valleys and the value of the harbors on the Adriatic Sea. This territory is in the hands of the Italians, and is the part of Albania which forms the crux of the problem under consideration. Its disposition will determine the future fate of the country, for I believe that as this region goes so will Albania as a whole go. It would be idle as well as wrong to attempt to break asunder this numerically small but homogeneous race of mountaineers.

The sector occupied by the Italian troops at the present writing runs north of the river Viosa (also called the Voi-

ussa) from about the bend of the river Semeni, with the Adriatic on the west, Greece to the south, and by the left flank of the French Armee d'Orient on the east, in the neighborhood of Ersek, on the line of communication from Santi Quaranta to Saloniki.

The French sector is smaller than the Italian and numbers fewer people, though within its boundaries are included the lakes Ochrida and Malik and the fertile valley of the latter, in which is Koritza, probably the wealthiest town of the country.

Throughout southern Albania—indeed, probably throughout all of Albania in these days—government is administered by the armies of occupation. The people have little to say as regards their own affairs and have been almost completely disarmed. In the Italian section, however, many local prefects and magistrates hold office and administer the law as it now exists, the old Turkish Code having been partially replaced.

NATIVES APPOINTED TO OFFICE

For this administration lower courts have been established, methods of procedure drawn up, and, wherever possible, natives have been appointed to minor offices. This recognition of the Albanians and delegation of authority to them has caused great satisfaction. They are beginning to understand that under the mild military control of the Italians they are treated simply as Albanians, without regard to religious differences. No iniquitous distinction in law is now made between Orthodox, as the people of the Greek Church are called, and Mohammedan. In this respect the Italian wisely differs from the Greek, who, perhaps naturally enough, sees little good in the Moslem.

The French have gone a step further than the Italians in Albanian affairs, last year proclaiming an Albanian republic at Koritza. Of this, however, at the time of my visit to Koritza, I could find no trace. The republic seems to have died quietly and naturally. It probably had no support from the people and was a forced attempt of the foreigner, upon whom the Albanians always look askance.

As a matter of fact, the Republic of Koritza had no reason for its existence. It seems that an Albanian, Germani, had been induced to come over from the Austrian camp to become prefect of police, a most important post in the new republic, but something went wrong with Germani; he has disappeared. At all events, Koritza and the surrounding country today remain under French control. A civilian prefect holds office, presumably under the general commanding, but a council of fourteen natives assists him in an advisory capacity.

MOST ANCIENT RACE OF SOUTHEASTERN EUROPE

The Albanians are regarded as the most ancient race of southeastern Europe. There is no record of their arrival in the Balkan Peninsula, no legend relating to their origin. They are thought to be descendants of the earliest Aryan immigrants, and with praiseworthy persistence have retained their mountain strongholds through many ages.

Except for Byron's casual tribute in "Childe Harold," the Albanians, unlike other peoples of the Balkans, have not been praised in song or story. Indeed, they appear to have received but little attention from the world, except to be characterized as a turbulent race of mountaineers, whose principal occupation has been to fight among themselves when not engaged in fighting against some one else. But, like the early Swiss, these rude, untutored people possess many primitive virtues. They have preserved with remarkable tenacity the traditions of their descent, and are brave, honest, and hospitable. Their lives having been spent in constant conflict with nature in its most unfriendly aspects, they have been taught from infancy to fight against man as readily as against the warring elements of the air.

THE BLOOD FEUDS OF A FEW YEARS AGO

Albania is notorious as the land of the blood feud—a tribal, or perhaps more properly a racial, custom observed for many centuries. Travelers and commentators usually refer to the Albanian mountaineer as utterly lawless, but in reality his actions toward his fellow-men, up to a few years ago, were based upon

Photograph from Gen. George P. Scriven

THE LION OF ST. MARK AT VUNO: ALBANIA

While not imposing in appearance like the famous Lion of Lucerne, similarly carved from the living rock, this bit of sculpture tells an interesting chapter in the history of Albania. It is a relic of medieval times, when Venice was not only mistress of the Albanian coast but the greatest commercial power in the world.

the strictest possible observance of law—a tribal law founded upon a most distorted idea of personal and family honor.

The smallest infraction of custom—a blow struck in anger, an unwitting shove in a crowd—inevitably led to the declaration of a blood feud, and the honor of the injured party was sullied until he had slain either the actual offender or some male member of his family. The relatives of the slain individual were then compelled to take up the man hunt, and thus the feud spread.

So fatal were these feuds that in some mountain districts it is said an old man is seldom to be encountered, in spite of the traditional longevity of the Albanian race. The men were killed off before they attained patriarchal years.

Many are the curious customs and rituals growing out of the blood feuds. It is the unwritten law of the land that a man must not be attacked while accompanied by a woman, and frequently a wife, daughter, or sister follows her menfolk on all journeys through the mountains in order, by her presence, to furnish protection from an implacable foe. Formerly in certain districts, it was possible to buy immunity from the vengeance of an aggrieved Albanian, the price varying from $50 to $80, according to the locality.

A rigid code protects a guest in the mountain fastnesses, and if a traveler has slept under the roof of an Albanian the host, according to tribal law, is obligated to declare a blood feud against any person who insults or harms the visitor within a certain length of time after he has been entertained.

A CHANGED ALBANIA

Such is a picture drawn of the people of Albania less than a decade ago. It is in striking contrast to the country as I saw it a few weeks ago, under the control

Photograph from Gen. George P. Scriven

IRON-SHOD WAR HAS CROSSED AND CRUSHED THIS ANCIENT BRIDGE OVER THE RIVER VIOSA AT KLISURA: ALBANIA

Albania's rivers will never help to solve the country's major problem of transportation, for none of them is navigable save the Boyana, which flows for 14 miles from Lake Scutari to the sea.

of the French and Italian armies. The change is especially conspicuous in that part of Albania which is under Italian administration. There the children are sent to school; the natives are paid more than a living wage for work which often is for the benefit of the people themselves; the country is effectively policed by the soldiers; and not an armed native, except of the Bandes, is seen from one end of the occupied territory to the other.

If feuds still exist they are unfulfilled and secret, for the arms of the mountaineers have been taken from them by the troops, and among themselves the Albanians are practically at peace. The old conditions will probably never return. Light is coming to Albania!

It seems probable that with political changes will come religious changes also, for, together with the Turks, many of the Moslem natives were driven from Albania; and with the coming of Italian schools and churches much increase in the influence of the Roman Catholic Church must naturally be felt.

Under the Turks the great majority of the Albanians, probably more than three-fifths, were Moslems. The conversion of the Christian population to Islam appears to have taken place during the sixteenth and seventeenth centuries. Of the Christians about a sixth are Roman Catholics, the remainder Orthodox, or followers of the Greek Church. In deference to popular prejudices, the bishops and priests of the Catholic Church wear the moustache and are typical specimens of the church militant.

Before the Italian occupation, education was almost non-existent in Albania; both Christian and Moslem were, and the adults still are, totally illiterate. Under Turkish control, instruction in the Albanian language was prohibited for political reasons. A single exception was made in

Photograph by F. J. Kech

ONE FAMILY, OR CLAN, OF ALBANIANS

In certain remote mountain districts of Albania, the tribal law, known as the Canon of Lek (a legendary lawgiver), still obtains in full force. By this law a man is complete master in his own house and may even kill his wife or children. Marriages are frequently arranged in infancy and may be consummated when the girl becomes 14 years of age. Among mountain clans the women till the soil in the valleys while the men guard the flocks on the hillsides.

the case of a little American school for girls at Koritza, which I visited.

In the days of the Turk there were primary and secondary schools in some of the towns, and instruction in the Koran was given in the village mosques, but neither reading nor writing taught.

ALBANIA UNDER THE AUSTRIANS

It is true that at Scutari a college and a seminary were established, with the aid of the Austrian Government; the Franciscans had several primary schools and three lay schools were supported by the Italian Government, in its endeavor, even before the occupation, to educate the people. In all these institutions Italian was the language of instruction. The priests of the Greek Church, upon whom the rural population depended for instruction, were often deplorably ignorant.

Of the Albanians north of the Allied lines no information is, of course, available, and the attitude of the Austrian, the German, and the Bulgar toward these unfortunate people is an unknown story, a hard one, I am inclined to think, from the rumors of hardship and forced labor which are current.

Though no census of population has been taken, it is estimated that the Albanians as a whole number some two and a half million people.* Their home land is a magnificent country, with its chaos of grand mountains, deep and fertile valleys, and beautiful streams — a region without forests, almost without woodlands, it is true, but superb in its stern majesty.

* An estimate given me in conversation in Albania as covering the entire race. It may be an overestimate.

Drawn by A. H. Rumsfeld

SKETCH MAP OF ALBANIA AND ITS BORDER COUNTRIES OF THE BALKAN PENINSULA

The sector of Albania now occupied by Italian troops runs north of the river Viosa from the bend of the river Semini to the Adriatic on the west and the French Armée d'Orient on the east (see pages 90 and 91).

The more attractive part of southern Albania lies, of course, near the Adriatic. Fruits and grain are profitably grown along the seacoast, with its sunlit inlets shut in by pleasant hills and with a climate which resembles that of Sicily.

Excellent grazing lands extend up the mountain sides, affording pasturage in times of peace for large flocks and herds, the people's chief source of livelihood, while fish from the sea and the rivers and game from the hills—deer, wild boar, hares, game birds, bear, and even the chamois—are important resources.

THE STRANGE RUMANI

Among the Albanians lives a fragment of a strange people who call themselves Rumani, said to be descendants of the Romans—of that fifth Roman legion which dispersed and was scattered along the old highway stretching from Durazzo to Constantinople. This great road of ancient Rome (Via Egnatia), called at its beginning the Appian Way, passes southeast through Italy to Brindisi; begins again at Durazzo, runs thence through Elbasan by Lake Ochrida to Krusha, and on to Monastir and Vodena; thence to Saloniki and beyond to Constantinople.

The Rumani are very proud of their origin, and answer the question of race by saying, "I am a descendant of the Romans." They are a simple, pastoral people, not given to robbery or brigandage. Their primitive little villages of stone are frequently seen in the mountains, often perched near high summits. A large colony of them, known as Vlachs, live on the slope of the Pindus Mountains in sight of Liascoviki, but far away across valley and gorge.

Photograph by Katrine Nicolaïn

ALBANIAN MOUNTAINEERS IN BLACK-BRAIDED NATIONAL COSTUME

As limited by the Conference of London, Albania has an area about equal to that of New Jersey and Delaware, but with only 800,000 inhabitants, about one-fourth the population of those two States. Less than a third of the Albanians reside within the territorial limits of their country (see page 94), the others being scattered through Macedonia, Serbia, Montenegro, Asia Minor, and Sicily.

Photograph from Gen. George P. Scriven

THE MOST EXTENSIVE RUIN IN ALBANIA: THE CASTLE OF ALI PASHA AT TEPELENI

Three names tower above all others in the history of Albania—Pyrrhus, rated by Hannibal first among the warriors of his age and the captain who caused both Rome and Carthage to tremble for six years; Skanderbeg, the national hero and for a time conqueror of the Turks; and Ali Pasha, surnamed the Lion of Tepeleni, one of the most remarkable and picturesque figures of modern times.

From the heights where they graze their flocks in summer, the Rumani descend into the valleys in winter; and on the road men, women, and children, surrounded by their hundreds of sheep and goats in search of grazing lands, form a picture of nomad life that reminds us of the days of Abraham.

There are said to be some 80,000 of these Rumani; but who really knows their number, scattered as they are over hundreds of mountain peaks, in inaccessible villages or caves and moving from place to place?

TOWNS OF SOUTHERN ALBANIA

The towns of southern Albania are few and, though strange and picturesque in appearance, are in reality poor in comfort. Of cities there are not any. Koritza, with some 20,000 people, is the largest place, but it is far from being a city. However, if the towns are somewhat mean and squalid, they are interesting to the eye and have the charm of old-world quaintness. There are but four worth mentioning: Arjirokastro, so old, at least in appearance, that its origin falls back into the mists of time; the pleasant village of Prematí, lying in a fertile valley along the river Viosa; Koritza, held by the French; and Valona, clean and thriving under the Italian army.

They are all pleasant places to look upon, nestling among the mountains, in the valleys, and by the sea, with their old gray walls and roofs of stone dotted with storks; but they possess none of the comforts or conveniences of modern life.

Such matter-of-fact things as trams, hotels, or cafés do not exist in Albanian towns and would seem wholly out of place. Water is drawn from the wells as it was 4,000 years ago, or maybe from some near-by stream. Inns are represented by the khan, a stone building, half house, half stable, where caravans and pack trains stop to rest.

Albania belongs to a time as far back as the annals of the world can reach and is as primitive as if it were in central China, almost as difficult to penetrate as Tibet itself. It is a land unfamiliar to the traveler and shunned by the tourist of today.

This was not always so, however, for along the Adriatic coast and behind the mountains that face the sea are many relics of the golden days of Venice and even some traces of Roman occupation. We know that Venice once highly prized the western shores of this beautiful region, and the sway of the Mistress of the Adriatic in medieval times is attested not merely by the fortress, strong for its day, which defended the roadstead of Porto Palermo, and by the Lion of St. Mark, roughly carved in the solid rock above the village of Vuno in the Chimara, but by the remains of many castles upon the hills.

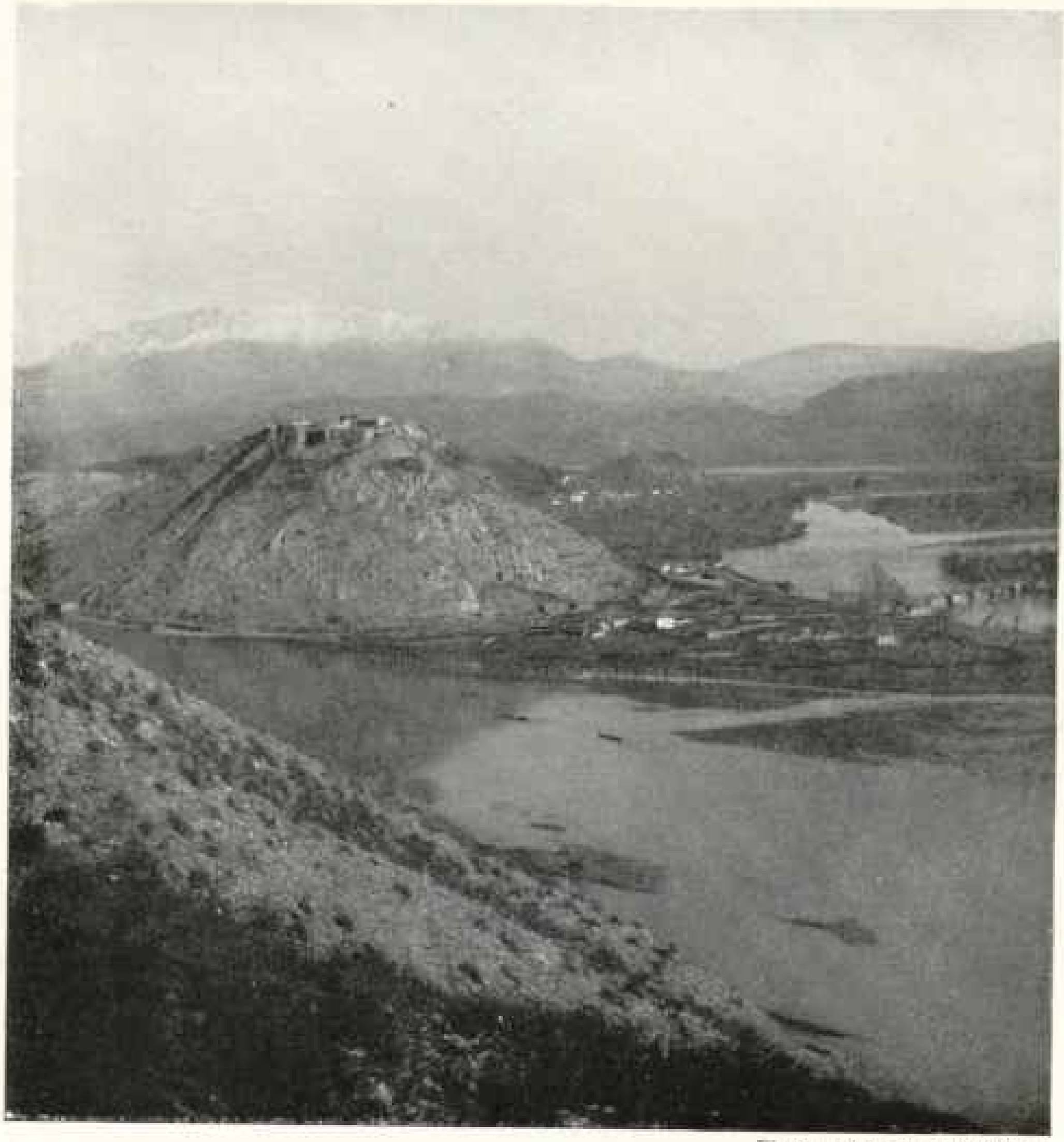
Above Arjirokastro and above Valona stand two of these Venetian ruins; but the greatest castle in Albania was the one whose ruins I saw in the old town of Tepeleni. It was not Venetian, but the birthplace of Ali Bey, the great Albanian leader, who afterward became a Turkish Pasha of three tails. Beside the greater ruins of this old castle stands the crumbling town, on the banks of the brawling Viosa at its junction with the Zrinos and facing a mountain gorge which is a gateway to Macedonia, where once a Roman legion defeated the Eastern hordes.

THE PICTURESQUE MOUNTAIN VILLAGES

If the three or four centers of population in southern Albania are a little disappointing as cities, this is not true of the country or of the picturesque villages which gather like gray splashes upon the grayer hills, where they appear to have nestled since the beginning of time. Rough stone huts they are for the most part, with flat stone roofs. For purposes of defense, they are usually situated half way up the lower hills, and the houses and outbuildings are often surrounded by strong stone walls.

The valleys are rich and well cultivated, chiefly by the women, but present a desolate, deserted appearance, except in the daylight working hours. Not a farmhouse nor a stable is to be seen amidst all the fertile acres. The crops cannot be stolen; no bandit would think of destroying them, and so they are left unguarded.

Both the people and country of Albania strongly remind the stranger of



Photograph by Katrice Nicolson

MEDIEVAL CITADEL OVERLOOKING SCUTARI: ALBANIA

During the Venetian occupation of Albania, in the middle ages, this lofty rock rising behind Scutari was strongly fortified. When the Turks came into possession of the country they partially rebuilt the old fort. The crest was the scene of a bitter struggle between the Sultan's forces and Albanian revolutionists prior to the declaration of the nation's independence by the Powers of Europe more than five years ago.

Switzerland as it must have looked in an earlier day, when it was more lovely and more unpeopled than in modern times, since it has become the summer playground of Europe. Some day, no doubt, Albania will be discovered by the world; and when it is, great will be the change therein and great will be the eagerness of people to see its wonders and enjoy its charms. Albania needs people, enterprise, and money; if given these three things, its development will be sure.

The people of Albania are first nationals and then religionists. Discord among themselves, chiefly between Christian and Moslem, has been one of the most

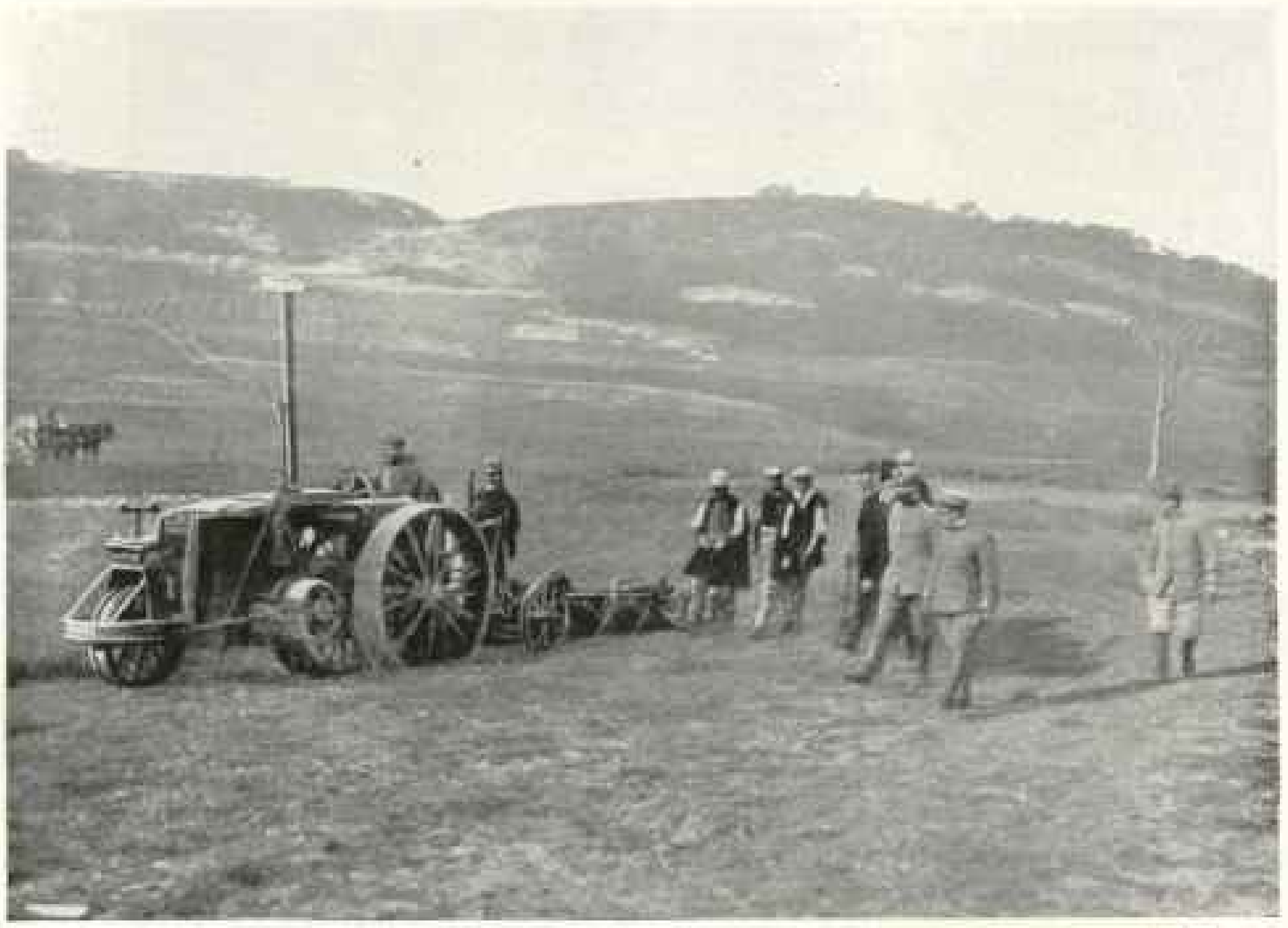
Photograph by Katzer, Nicolov

THE LOWER PART OF THE TOWN OF SCUTARI: ALBANIA

Before the European Powers agreed, in 1912, that Albania should be an autonomous nation, Scutari was the capital of a Turkish vilayet, but Constantinople's sway over the Albanians was more nominal than real. A traveler reports that on one occasion a gendarme pointed to a passer-by and said with admiration, "That is a brave man, much respected; he has killed more of his fellow-townsmen than any other Scutarine." In those days, assassination is said to have been regarded more as an amusement than as a crime.

THE MARKET-PLACE IN THE TOWN OF TIRANA: ALBANIA

The Albanian townsman affects two types of headdress—a white skull cap and a scarf twisted around his head and under his chin, after the fashion of a Bedouin. Cattle-raising is the chief source of livelihood for the mountain tribes. The small pack donkeys loaded with wood, to be seen in the middle distance, bespeak the fact that wheeled vehicles are seldom encountered in the hill districts, owing to the rough trails which, by courtesy, are called roads. In southern Albania the Italian army of occupation is now building many miles of unsurpassed highways (see page 110).



Photograph from Gen. George P. Scriven

AN AMERICAN TRACTOR PLOW IN USE ON THE EXPERIMENTAL FARM AT VALONA: ALBANIA

This farm, conducted under the auspices of the Italian Government, is intended primarily as an example to Albanian tenants and proprietors who are inclined rather to the use of the ancient crooked-stick plow. It serves the Italians as a huge war garden, however, for its tillers are obliged to sell their products exclusively to the troops.

serious evils in the past; but this has been checked, to some extent. The religious troubles, if unfermented by Greek or Turk, perhaps would have been no greater than in Switzerland of the past or in Ireland of the present. The factions, if permitted, will soon learn to live in peace.

In the past, under the Turk, whose laws were made to be violated, order did not exist; the hand of power punished, but it did not lead. So it happened that schools were neglected and the people, for the most part, remained illiterate. The young Turks were probably allowed to attend or not to attend the indifferent schools provided, but the Albanians were allowed no schools taught in their own language. Their children, if instructed at all, were taught in the Turkish or the Greek schools. In spite of this, the children are intelligent and those whom I saw in the Italian schools were bright and eager to learn.

THE ALBANIAN AN OPEN FIGHTER

But, ignorant or not, the Albanians have in them the making of real men and women. The man is a fighter, but an open fighter who scorns a treacherous advantage; he believes in the vendetta, but will warn his adversary before striking him. If he becomes a bandit by profession, he is not in his own eyes an outlaw; he lives beyond the control of law. He strikes his enemy, but would scorn to be a mere murderer and is above being a thief. Honorable in his dealings with strangers who are properly accredited to him or his community, the latter are safe under his roof. He is especially honorable in his attitude toward women. It is said that before the war, alone and un-

Photograph from Gen. George P. Scriven

CELEBRATION AT VALONA WITH ITALIAN OFFICERS AND NATIVE CLERGY IN THE STAND

Valona is one of the chief cities of southern Albania and is beautifully situated on the shores of the Gulf of Valona. Under the Italian influence it has been made to thrive and prosper.

protected, a woman could travel safely from one end of Albania to the other.

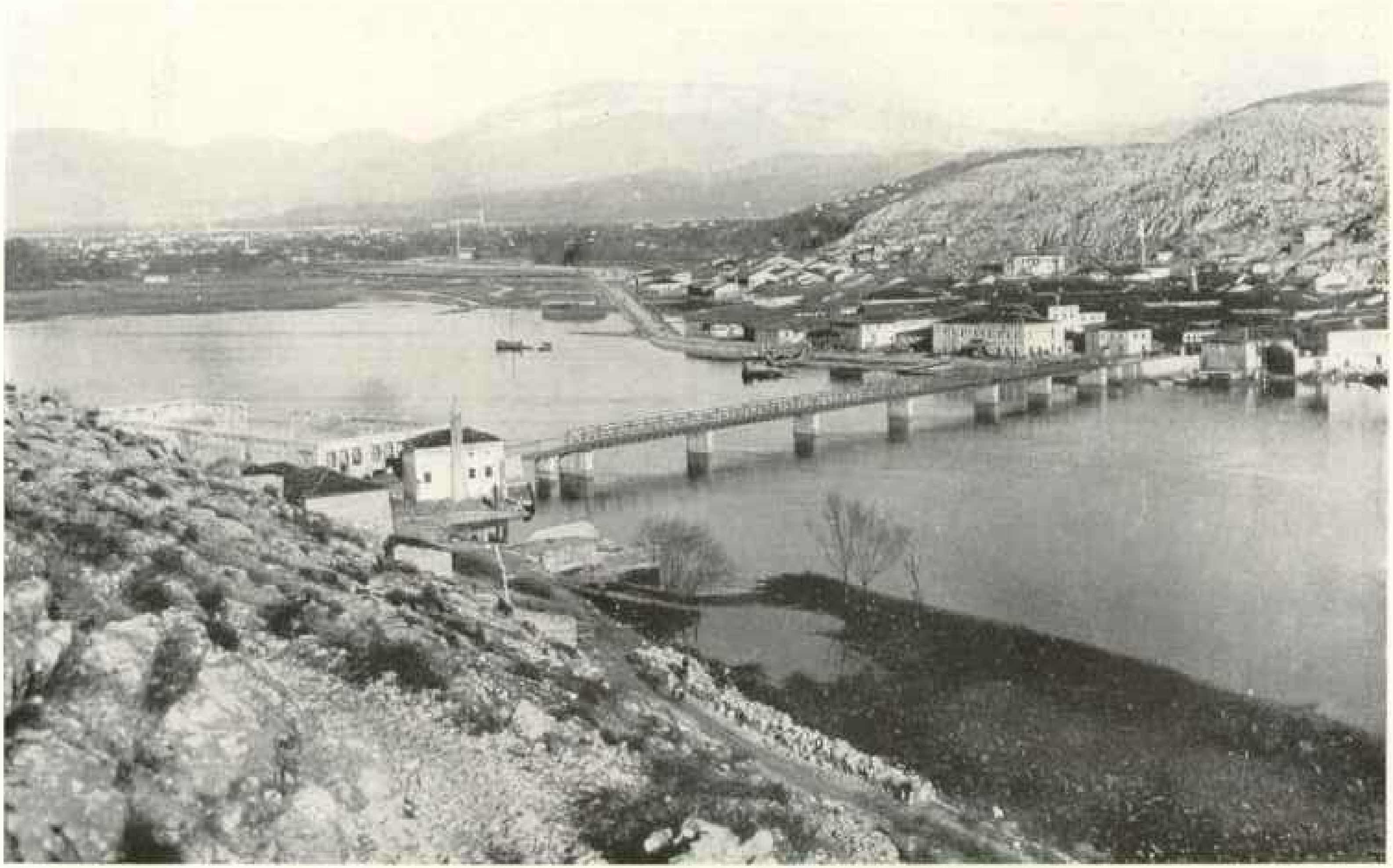
The women are worthy mothers of the men. Industrious and hard working, I have seen hundreds, indeed thousands of them, some with their little children, sitting by the roadside with a few old men, breaking stone hour by hour through the long day, hot or cold, and earning from the Italian Government three lire per day with their bread and cheese. Even the little children are given the latter in payment for their puny efforts. No doubt the French pay as well as the Italians; and so the people live better now, probably, than in times of peace, since their bread is secure.

In Albania the women are the workers, the Orthodox more so than the Mohammedans; but all work. They are moral too; prostitution is unknown, and so an illegitimate child is said to be a disgrace to the mother, the family, and the community.

The Albanians are somewhat harsh of feature, though the children are bright and the young girls are sometimes pretty. The unattractive appearance of the women is increased, if not caused, by the nondescript garments commonly worn in these days, shabby, ill-fitting, and fastened together anyhow or nohow.

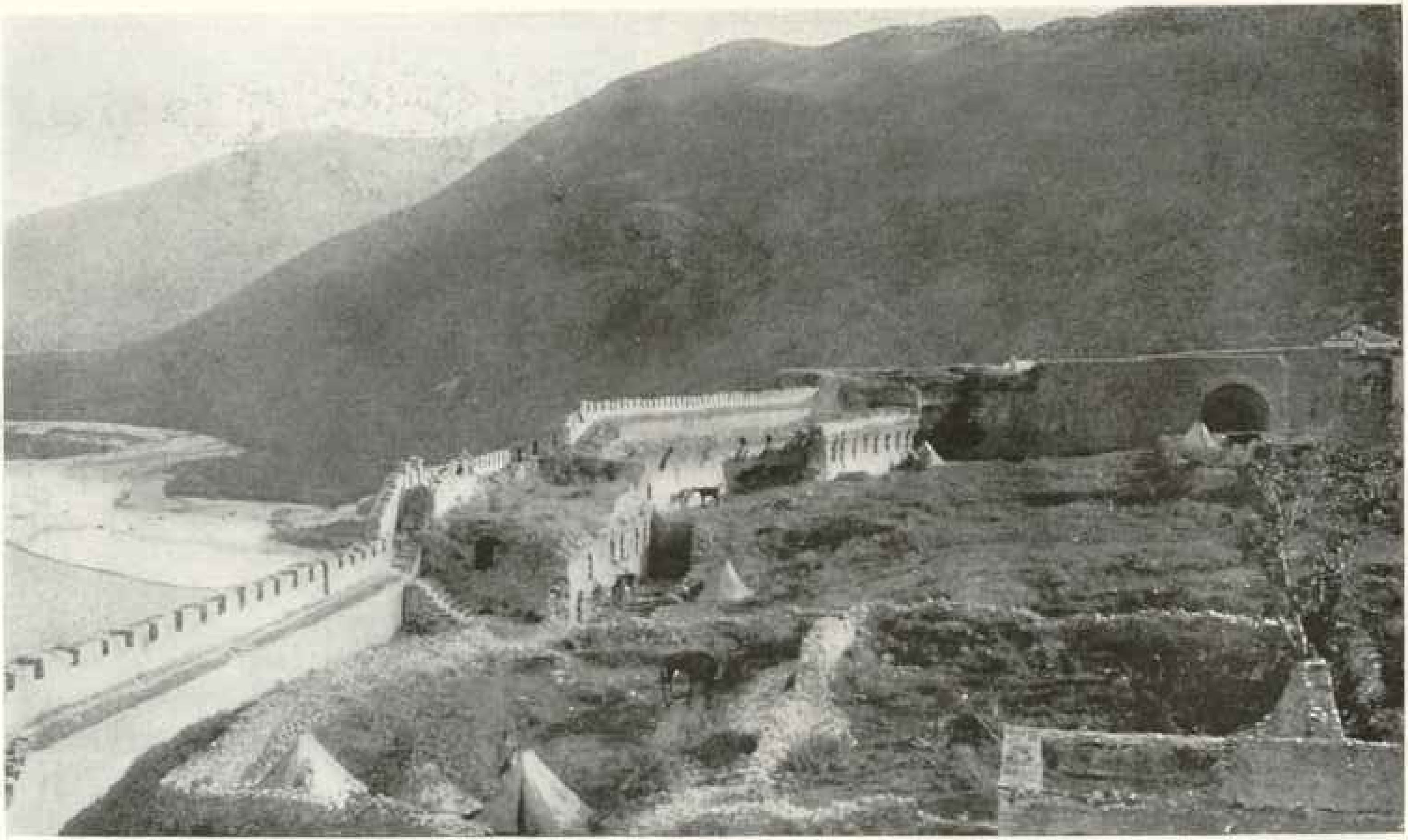
Of the people of Macedonia, seen in the towns or along the roads and the countryside, the same may be said. In both regions there is little that is characteristic in the costumes. Clothing, generally of an inferior European make, is worn perforce, for even in Albania wool is now very scarce and dear.

The pretty national dress of the Albanian is seen only on gala occasions, when the men come out with the white skirt, over tight-fitting breeches, vest and coat of white wool, with the pointed, tufted shoe and white or red turban, and usually, especially in the rain, the long sheepskin cloak, generally black. The cap, or fez,



SCUTARI AND THE ENCIRCLING HILLS: ALBANIA

"Albania, although in sight of Italy, is less known than the interior of America," wrote the historian, Edward Gibbon, a hundred years ago. It is still largely *terra incognita*. A letter addressed to "Albania" was recently sent from England to America and was returned from Albany, N. Y., with the notation, "Not for Albany; try Europe."



Photograph from Gen. George P. Scriven

THE EAST SIDE OF THE CASTLE OF ALI PASHA: TEPELENI, ALBANIA

When Ali was fourteen years of age his father, the hereditary bey of Tepeleni, was slain by neighboring chiefs. Whereupon his mother, a woman of extraordinary force of character, organized a brigand band and reared her son with the idea of avenging his parent's murder. Thus tutored, Ali in time became the most powerful pasha of the Ottoman Empire. As the undisputed master of Epirus, Albania, and Thessaly, not even Napoleon disdained to enter into an alliance with him.

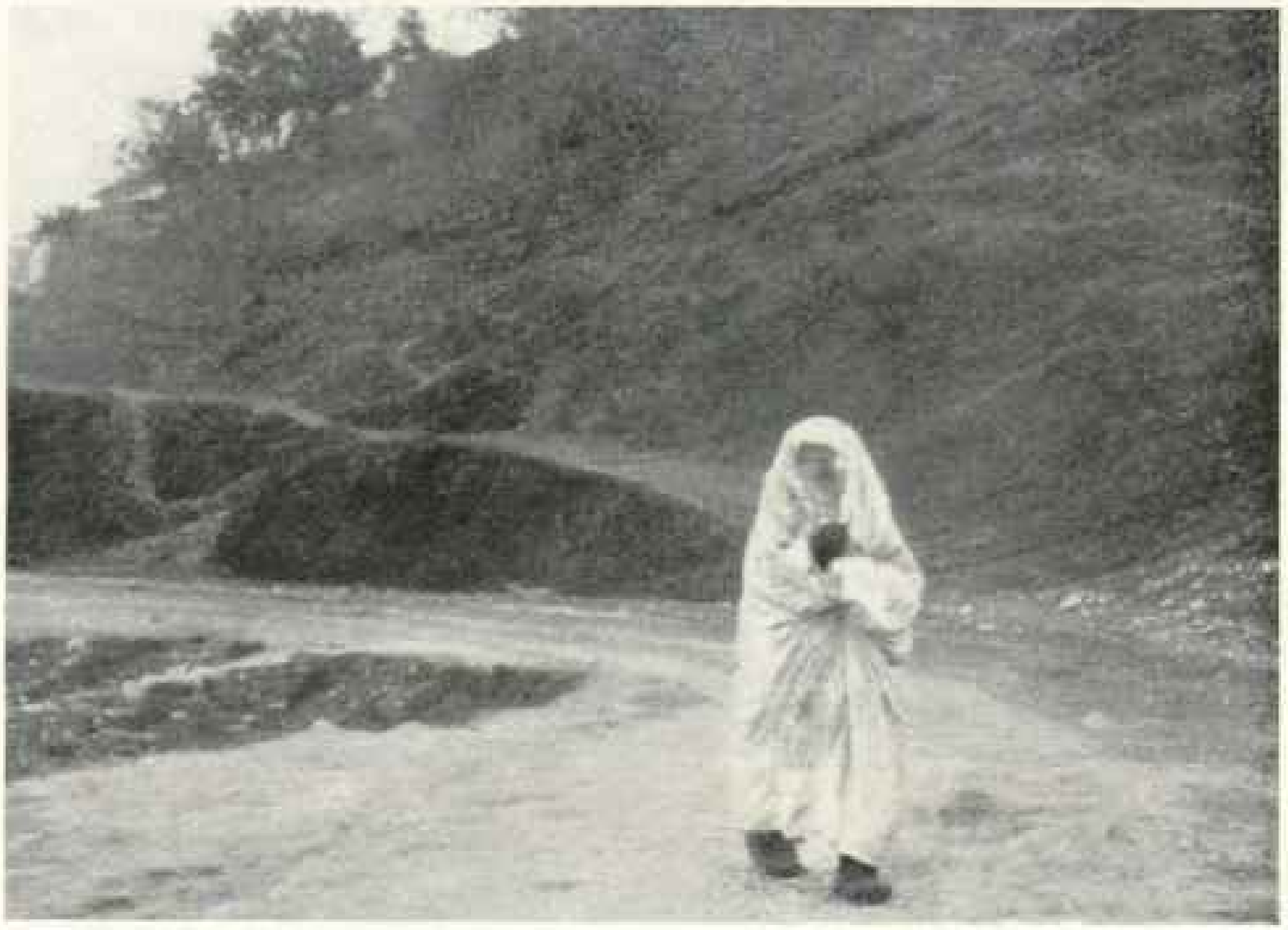
Photograph from Gen. George P. Scriven

ALBANIANS DANCING AROUND THEIR OWN COLORS AND ITALY'S ENSIGN AT DELVINO: ALBANIA

"The wild Albanian kirtled to the knee, with shawl-girt head and ornamented gun," of whom Byron sang, is seldom seen nowadays, except on gala occasions, such as this. The native finds it cheaper to dress in factory-made clothes of western Europe. The poorer classes are never handicapped by extensive wardrobes; in some sections the inhabitants sew their garments on, and these are never removed until they fall off.

Photograph by M. A. Stein

MOUNTAINEERS IN GALA ATTIRE CELEBRATING A FEAST DAY IN TOWN: ALBANIA



Photograph from Gen. George P. Scriven.

ON THE ROAD TO ARJIROKASTRO

"In these days the women seem to have no special dress. Sometimes they appear in trousers of a kind, with a long, legging-like stocking drawn over; sometimes they wear skirts and shoes, if they can get them." This one, wrapped in her white robe, is a Mohammedan, judging from the veil that obscures her face.

however, is worn when possible as a symbol of race.

In these days the women seem to have no special dress. Sometimes they appear in trousers of a kind, with a long legging-like stocking drawn over; sometimes they wear skirts and shoes, if they can get them.

The women of the poorer classes now appear hardly more than beasts of burden, carrying on their backs great bundles of brushwood, or maybe of heavy stones, that rest on a kind of wooden pack in the form of a shelf placed between the shoulders. In the fields, too, they are seen plowing or digging deep into the soil, always with sad, work-worn, patient faces that reflect the harshness of their lives.

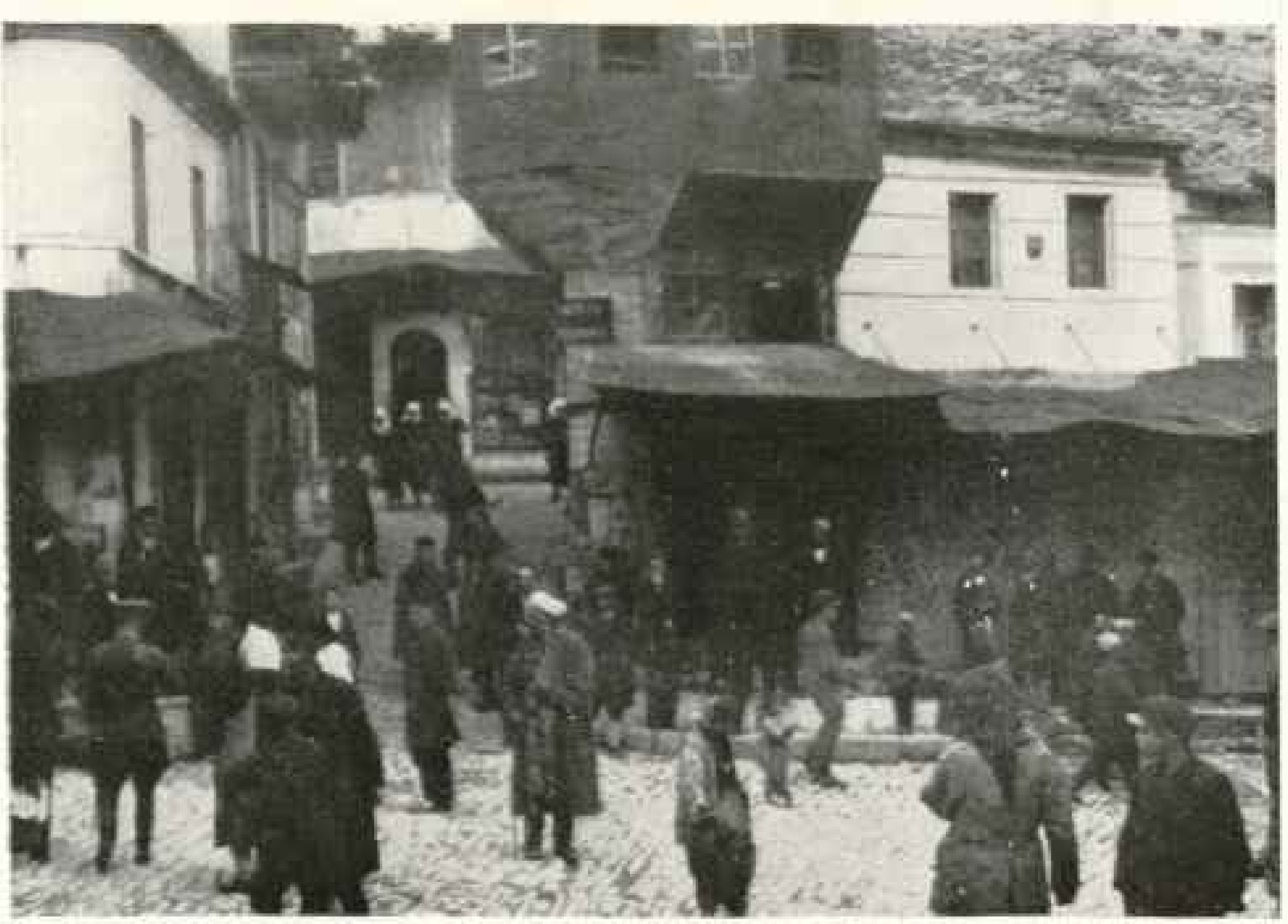
THEIR CHIEF DESIRE

The Albanians are probably neither so good nor so bad as they have been painted, but certainly they are worth the effort necessary to develop them and their country. Their chief desire now is to be allowed to manage their own affairs and to work their little farms in the fertile valleys, to herd their sheep and weave their garments of wool, if only they are let alone. They do not submit easily to government; have no love for chance strangers, and are slow to accept change in the manner of living or of cultivating the fields.

Nothing has been said of the minerals that surely are to be found in the mountains of Albania. Little is known regarding the latter, for they are practically unexplored. It is not improbable that with the advent of the armies systematic search for mineral wealth will be made.

Mineral pitch, or asphaltum, has been known since the time of the Romans, and near Valona I have seen specimens, clean, black, and hard, which promise well

THE ROAD BELOW THE VENETIAN CASTLE AT ARJIROKASTRO



Photographs from Gen. George P. Scriven

A STREET OF ARJIROKASTRO

"They are all pleasant places to look upon, nestling among the mountains, in the valleys, and by the sea, with their old gray walls and roofs of stone dotted with storks; but they possess none of the comforts or conveniences of modern life."

Traces of petroleum, too, have been found by the Italians, and I am told boring is, or is about to be, undertaken. Copper and iron are believed to exist in the hills about the Malik Valley, and coal, silver, and lead are said to be present elsewhere in the mountains.

Gold mines were worked in ancient times and Albanian silver was known to the Venetians, but the whole mountain country has lain neglected for ages. It cannot be doubted that with the coming of the soldiers, the building of roads, and the development of the country now going on, especially in sections occupied by the Italians, there will be a change in Albania and in its people.

Photograph from Gen. George P. Scriven.

A REPRESENTATIVE OF THE OLDEST RACE IN SOUTH-EASTERN EUROPE

The Albanian calls himself a "Skypetar"—Son of the Mountain Eagle—and he deserves the appellation, for he has made his home among the barren crags of his native land for many centuries, maintaining to a remarkable degree his independence and his racial integrity.

CLIMATE IN UPLAND AND LOWLAND

The climate of Albania is considered healthful in the uplands, though subject to violent changes, which are trying to the stranger, at certain seasons, even if he is confined to one locality. But when a traveler, moving rapidly about the country in a motor—the only practicable way of traveling in these days—rushes several thousand feet from a mountain height, cold and windy and probably snow-covered, into a warm, sunshiny valley and back again in the fraction of an hour, it is well to have a care.

May is the pleasantest month of the year and the valleys then look their best. Snow, of course, lies in the mountains until well into the spring, but seldom lasts throughout the summer, as the tallest peaks do not attain an elevation of more than 8,000 feet.

Photograph by M. A. Stein

THE CUSTOM-HOUSE AND BOAT LANDING AT SCUTARI: ALBANIA

The boat commonly used on Lake Scutari is known as a *londra*, and somewhat resembles a Venetian gondola, though more crudely built. Both prow and stern are sharp-pointed and run high out of the water. According to its size, it may be propelled by from one to twelve oarsmen, who stand facing the bow and sing a wild barbaric chant as they force their oars through the water in short, quick jerks.

Malarial fever afflicts both Albania and Macedonia. The army medical report in my possession gives a rate of 25 per cent since the occupation of Albania—probably an average, for I have heard of one command having 80 per cent of its men sick with malarial fever at one time. However, the health of the troops at the time of which I am writing, the spring of 1918, was very good.

The fever of the Balkans is persistent, but is not especially fatal. Still, it is to be dreaded for its lingering effects and the great debility it causes. The usual specific is quinine, a supply of which is placed on the mess table or carried about in the pocket.

In Macedonia, especially north of Saloniki, in the Struma Valley, which produces probably the finest cigarette tobacco of the world, there is found a climate said to be as bad as that of the west African coast.

Winters are short, but cold and rainy, and the country roads become almost impassable lakes of mud, over which there can be little transportation. In consequence, military operations are limited to the few metalled roads that exist and to the dry season.

SPLENDID HIGHWAYS BUILT BY ITALIANS

Before the arrival of the Allies, one of whose first cares was to improve the roads, few highways existed in Albania and Macedonia, except the old Turkish road from Santi Quaranta to Saloniki, with its branches in the former country south to Janina, in old Greece, and north to Berat.

During my stay in Albania I traveled by motor over many miles of road built by the Italians—not mere ephemeral military lines of communication, but permanent highways, admirably traced and skillfully built. I speak particularly of the

Photograph from Gen. George P. Scriven

ITALIAN SOLDIERS ARE TEACHING ALBANIANS THE ADVANTAGES OF MODERN HUSBANDRY

Under the direction of General Ferraro, several up-to-date experimental farms have been established in southern Albania and the natives are being taught to use the most improved farm implements, such as American plows, cultivators, and harrows. In the valley of Monastir the British also are introducing modern agricultural methods; one of their army farms has an area of 1,000 acres.

magnificent 55-mile turnpike from Valona to Tepeleni and the highway from Santi Quaranta to Valona. The latter is probably one of the most interesting examples of road-building to be found the world over. It was constructed, under the direction of General Ferraro, by Italian soldiers and several thousand Austrian prisoners, aided by the Albanians of the country-side, who were paid by the Italian Government. It extends 81 miles, for the most part along the Adriatic, but high above the sea. Built for the permanent use of the people of southern Albania, as much as for military purposes, it is, like the old Roman roads, made to last through the centuries, and this is one of the superb highways of the world, both in point of construction and outlook. It was sufficiently completed for motor travel in the remarkably short time of about 67 days.

There is today a good metalled highway running from Valona all the way across the Balkan Peninsula to Saloniki, a distance of 363 miles. It is the old Turkish Highway which had long lain neglected and had become almost impassable in places, but which is now kept in excellent repair by the troops and money of Italy, France, and Great Britain.

It is almost impossible to conceive of the existence of a railroad in Albania; yet with the development of the country railroads will come, and who can doubt that this war, terrible and destructive as it is, will bring with it into the shadowy regions of the world the torch of enlightenment and progress?

Albania needs light and help from the great people of the earth. Too long has she lain in darkness, with the hands of her neighbors always at her throat. It is no wonder that she gropes in the infancy

Photograph from Gen. George P. Scriven

REPRESENTATIVES OF THE ITALIAN ARMY OF OCCUPATION AND NATIVE ALBANIANS AFTER A RELIGIOUS SERVICE AT CHIMARA; ALBANIA

In their conduct of Albanian affairs the Italians are drawing no distinctions between Moslem and Christian. Under the Turkish régime there had been discrimination against both the members of the Greek Orthodox and the Roman Catholic adherents for more than 400 years. General Scriven is the officer in the center, with General Ferraro, of the Italian army, on his right.

of national life under the tutelage and restraint of the child; but she is a lusty infant, promising a sturdy maturity, when once a suitable and acceptable guardian for her can be found.

A LAND OF LARGE ESTATES

The lands of Albania are largely owned by great proprietors. Many of the estates were in the hands of Turks before the war. Others of the great land-owners are Albanians, among them the powerful family of the Vlores, at Valona, which is said to possess over 150 square miles of land. This family, Vlora (flower), gives the name Valona to the town. As an indication of the upheaval due to war in Albania, it is interesting to note that one of the sons of this historic house is now interned in Sardinia; one is in the Italian army; one is in Switzerland, and a fourth in Constantinople. The great ancestral home stands lonely and neglected—a roosting place for storks.

Farm lands are worked to a great extent by tenants, but some are owned and cultivated by the villages or communities, which they surround, and the ownership of these is secure. But what of the lands owned by the absent Turk or Albanian, of whom, as in the case of the Vlora family, some are sympathizers with the Allies, others with Turk or Austrian? This question looms large in the future.

Albanians hold to the ancient methods of farming. The crooked stick, sometimes reinforced with iron, still serves as a plow, and a pair of small oxen or an ox and a buffalo draw the implement. A great iron hoe is used by the women to break the sod. The ground yields abundant return, producing in the valleys, especially of the south, good crops of rye, oats, barley, and corn (maize). But sheep and goats are almost the only wealth of the people who live on the mountain slopes.

Forests are few and the mountains, as a rule, are rocky, barren, and stern of aspect. Often, however, they are covered with a low, green scrub. Occasionally, high on the mountains one sees pines and firs, even among the snow fields.

The Turk has never spared trees, and as a consequence both Albania and Macedonia are almost denuded. Even in the fertile valleys the oak, beech, poplar, and walnut are to be found in no great numbers. The plane tree is perhaps most conspicuous. Of fruits there are the mulberry, cherry, and pear, while in the Chimara, on the coast, the oranges and lemons are magnificent; and around Valona olive groves flourish and are well cared for by the Italians. Grapes which yield a fair wine are grown in Albania, and so, too, is tobacco.

NATIVES ARE STUDYING ON ITALY'S EXPERIMENTAL FARMS

By the application of modern farming methods the Albanian valleys of the south could be converted into veritable gardens. The Italians have made a beginning in the direction of training the Albanian farmer by means of experimental farms. The best of those that I have seen is at Valona. It is established in a valley north of the town, where there are some 400 acres under cultivation, producing wheat and such vegetables as onions, cabbages, and lettuce.

Excellent houses have been erected for the 35 farmer-soldiers detailed to cultivate this farm and instruct the natives, of whom about the same number are employed. The latter are paid one lira per day, together with a little food, principally corn meal.

For the instruction of the country people, as well as for practical purposes, modern methods of cultivation are used and approved farm machinery employed, including an American plow and a gasoline-driven engine.

The farm this spring was only in its second season, but already an average of 4,000 lire per month was received from the sale of the produce, chiefly, of course, to the markets of Valona for use of the soldiers. The farmer-soldiers are also raising pigs, chickens, turkeys, and pigeons and are experimenting with hares.

This is a great work, intended primarily as an example to Albanian tenants and proprietors, who are given seed and farm machinery by the Italian Government, but are required in return to sell their produce for the use of the troops. Prices are fixed at a moderate rate; for instance, eggs for the officers' mess at Va-

Ioua cost about 14 cents a dozen, whereas in Rome they sell for 50 cents.

The success of the Valona experimental farm is due to the efforts of General Ferraro, who is a great administrator and takes almost a boyish delight in this particular activity. I saw several other experiment farms: one at Liascoviki, in the heart of the mountains; one near Perati, at the junction of the Viosa and Saraudoporos rivers, and one in the rich valley of the Viosa, near Premati.

So the Italians have made a beginning, and a good one, in training the Albanians in improved methods of agriculture. But time and opportunity are necessary. Much has been done, considering that this is a period of war, and that all work of improvement behind the lines depends on conclusions fought out in front of them.

Who knows how much would have been done by the Italians for the improvement of Albania if they could have used both hands instead of being compelled to fight with one while they worked with the other?

THE UKRAINE, PAST AND PRESENT

By Nevin O. Winter

THE revolution in Russia has demonstrated to the world one fact long recognized by students of Russian affairs. It is that in the old Russian Empire there was little sense of nationalism or cohesiveness. While the racial homogeneity of the Slavs, the preponderant element of the population, has always been most pronounced, the term Russia meant little to the vast majority of the people. There was nothing that could compare with the love of the Anglo-American for the Stars and Stripes, of the Frenchman for his beloved France, of the Anglo-Saxon for Great Britain.

With the passing of the Czar and the authority of the church the only forces of cohesion disappeared. Were it otherwise it would not be possible for so many separations of large sections to follow without an apparent pang on the part of those still left or those going out for themselves.

It was but natural that Finland should revolt, for the Finns are not even Slavs. But in the case of Little Russia, or the Ukraine, there is a story that is worth the telling.

What is the Ukraine? This is one of the many questions that people are asking today. The Poles and the Lithuanians of a few centuries ago knew well this most turbulent section over which they attempted to rule, and Imperial Russia for a long time was greatly troubled by this very unruly part of her expansive domain. The Tatars and the Turks felt its proximity because of the many raids made upon them by the wild warriors of the steppes.

In recent years the Ukraine has quieted down, so that the casual students of today hardly realized that there was such a distinctive section left, living in the belief that the Slavs of the Ukraine, or Little Russia, as it is better known, had become thoroughly amalgamated with the Great Russians of the Petrograd and Moscow sections. The events of the last few months, however, have revealed the real situation.

The Ukraine has had a troublesome career. The wild Scythians helped to feed ancient Greece and her colonies from these same endless steppes whence Germany now expects to draw sustenance. A thousand years ago Kiev was already becoming an important place. When the Saxons still ruled England, in the long ago, the banks of the Dnieper were a meeting-place for many races, drawn thither by commerce. Religious differences had not yet arisen, for all were worshippers of idols. Even then a Slav people were safely established here, sowing and reaping their harvests and sending their surplus grain down this river to the Black Sea.

The name Ukraine means "border-marches." For centuries it was the bul-

wark that protected Poland and Lithuania from the Tatars, Turks, and other migrating Orientals. As a result it has had cruel taskmasters.

The native population was largely Cossacks—a wild and unruly people at that time. They were not originally a tribe, but were men who went forth into the wilderness to find freedom. The vast steppes, covered with grass to the height of a horse, within which a multitude of game lurked, lured them on.

There were Poles and Lithuanians and Russians and even Turks among them. They became marvelous shots, riders, and swimmers; their horses were famous for their swiftness and endurance. Their differences gradually blended in a unity of purpose and principle.

PRIMITIVE GOVERNMENT REPUBLICAN IN FORM

The name Zaporogians was applied to the community that was the heart and soul of the great Ukraine. Their government was crude, but very republican in form. Each year the old officers laid down their duties in the presence of a general assembly, even in that day called the Rada, and new ones were then chosen.

As any member of the tribe could be elevated to the highest office, it permitted each one to aspire to this dignity. The highest official was known as the "hetman." If unpopular, he was sometimes choked to death—an effective, if cruel, displacement.

They carried on an intermittent warfare with Tatars on the east, stealing their cattle and occasionally sacking the unprotected towns. Again, their warring excursions would be directed against the Turks to the southeast, in the Balkans. When tired of this they turned northward to the Slavonic population.

These early Ukrainians were ever at war with somebody and for somebody. They fought with Poland against Russia, with Russia against Poland, with Poland against Turkey, with Turkey against the Tatars. They assisted in placing an unfrocked monk upon the throne at Moscow. They were simply natural warriors who rejoiced in that occupation. The warrior shaved his head except for a wisp on the crown, which was allowed to grow long enough to wind around the ears.

Although professing the Orthodox Greek faith, they were the brigands and the corsairs of Christianity. Though nominally subjects of Poland for a long time, the Ukrainians were constantly involving Poland in trouble with the Tatar and Turkish rulers. At times they even captured Polish peasants and sold them as slaves to the Tatars, who in turn passed them on to Persians.

CHMIELNICKI'S TERRIBLE REBELLION

The most serious conflict waged by Poland with her rebellious Ukrainians was during an insurrection under Chmielnicki, in 1649. The massacres and cruelties perpetrated by the half-civilized hordes from the Ukraine were as barbarous as those of the American Indians during the onward march of the whites. The conditions existing here are vividly set forth by the famous Polish novelist, Henryk Sienkiewicz (who wrote many other splendid books besides "Quo Vadis," for which he is best known among Americans), in his novels covering different periods in Polish history.

Upon the failure of his rebellion Chmielnicki offered the annexation of Little Russia to Moscow. This offer was accepted in 1653, when it came under "the suzerainty of that growing empire." Always striving for complete independence, the Ukraine was never quite able to achieve it. Two wars with Poland resulted from that action.

It was more than a century after its incorporation before the entire province was brought into complete subjection by the developing Russian Empire. The "hetman" was maintained for some time; but this office was abolished by the vigorous Catherine the Great, and under her it became an integral part of the Empire.

The Ukraine's experiences with war and disaster would long ago have broken the spirit of a race gifted with less elastic temperament. There are elements in his temperament that enable him to stand much oppression without revolt. This characteristic may help the German in his attempts to make the Ukraine a subject nation.

Photograph by Nevin O. Winter

A MARKET SCENE IN KHARKOV; RUSSIA

Kharkov is the leading commercial city of the real Ukraine, for Odessa does not properly belong to the Little Russians, although it is now included in the bounds of the subject nation which Germany is trying to establish. Before the war, Kharkov was the administrative center of the great iron industry and coal mines of South Russia.

The Little Russians have worked hard and fought hard, and they have emerged a fairly united and still vigorous people. The population increases more steadily than that of Great Russia, as the people are greatly attached to home and do not care to wander far from their native villages. They are great lovers of the soil and cling to it with a passionate tenacity.

EXTENT OF THE UKRAINE

The Ukraine includes southeastern Russia, with the exception of the province known as Bessarabia, which partakes of the character of the Balkan States and is peopled with Roumanians and Bulgarians. The great seaport of Odessa and surrounding country have been added to it under the new alignment.

The Ukraine does not reach much north of Kiev or east of Kharkov, but it is a large State in itself, about as large as the German Empire, with some twenty-five or thirty millions of people living in it.

The largest city of the real Ukraine is Kiev, around which national life probably centers because of the deep religious associations in connection with the shrines and many holy places. It was at one time the capital of all Russia. Kharkov is the leading commercial town in it, unless Odessa, on the Black Sea, is considered.

About four million Ukrainians live in Austria, in the province of Galicia, and are there known as Ruthenians. They are exactly the same type of people as the majority of those living in the Ukraine and would be classed with them ethnographically.

THE LURE OF THE STEPPES

There is a lure about the limitless stretches of the steppes in the Ukraine.

Photograph by Nevin O. Winter

A GROUP OF PEASANT WOMEN ON A RELIGIOUS PILGRIMAGE TO KIEV

The Holy City of the Ukraine is visited annually by hundreds of thousands of pilgrims. It is the Jerusalem of the Little Russians. The catacombs, where repose the bodies of saintly recluses, are among Kiev's most sacred places, and here the pious ones kiss the shriveled hands laid out as hallowed relics by the monks. Contagion frequently spreads as a result of this practice.

In wide, level spaces, or in gentle undulations, they reach out until sky and horizon meet in a barely perceptible line. Parts of it remind one very much of our own western prairies. In spring and summer it is an ocean of verdure, with the varied shades of green of the growing vegetation interspersed with flowers of many hues; later, in the autumn, after the crops are harvested, it becomes a brown waste of stubble and burned-up pastures; in winter it is a white, glistening expanse of snow.

The unending forest land of the north has disappeared—not suddenly, but by degrees. Most of it is treeless, however, and a feeling of sadness and almost depression involuntarily creeps upon one as he travels over the steppes for the first time.

There are not many old towns in the Ukraine. Except in Kiev and Kharkov, one will hardly find a building more than a hundred years old. No old medieval churches built up by the toil of generations of devout hands, no old chateaux of the nobility, no palaces rich in pictures, will be encountered. The great majority of the towns are still big, overgrown villages.

The towns are separated from each other by enormous distances, with imperfect communication. The peasants plant their villages in the lee of some swell in the surface or by the edge of a stream in which they can water their flocks during the drought which may come.

WINDMILLS EVERYWHERE

The villages stretch down little valleys seemingly for miles instead of being compact, as in most countries. The only con-

Photograph by Nevin O. Winter

PEASANT GIRLS OF KHARKOV: LITTLE RUSSIA

While the Kharkov district of Russia has developed greatly as a manufacturing and industrial center in recent years, the chief occupation of the population is agriculture. The breeding of sheep, cattle, and horses is also an important activity, and at the four great fairs held annually in Kharkov, before the war, thousands of horses were bought and sold.

spicuous feature will be a church or two and the many windmills on the horizon.

Windmills are exceedingly common and dot the landscape on every hillside. Some will be still, while others, with their broad, far-reaching arms, furiously beat the air that blows over the steppes. Silvery gray they appear from age, as all are built of wood, and they are usually unpainted. Many of them seem ready to fall to pieces from age.

DIFFERENCES BETWEEN THE UKRAINIAN AND THE GREAT RUSSIAN

The general use of windmills is due not so much to lack of water, for they will be found near streams, but the flatness of the country does not give enough fall to allow the use of water-power. They are used to grind grain, and the farmers may be seen bringing their domestic grists to them, as they did to the pioneer water-mills in our own country. In many ways can the dissemblances of the Ukrainians with their former Muscovite compatriots of the north and east be traced. They speak a dialect which varies considerably from that spoken to the north and northeast of them. Their language is said to be nearer the old Slavonic than that of the Great Russians.

The people are handsomer than the Great Russians. Better nourishment probably has something to do with this, or the natural distinction between a northern and southern people, but the admixture with other races has also left its trace. They are, in general, taller and more robust.

The natural brightness and vivacity of the Slav temperament, which one will also find exemplified in the Pole, has not been dimmed by the infusion of the more stolid and melancholic Finnish blood, as

Photograph by Nevin O. Winter

A STREET SCENE IN ODESSA, THE CITY CREATED BY CATHERINE THE GREAT AS A STEPPING STONE TOWARD CONSTANTINOPLE

With wide and well-paved streets, many of them bordered with trees, Odessa is one of the most beautiful as well as one of the greatest commercial cities of Russia. Situated on the shores of the Black Sea, 20 miles north of the mouth of the river Dniester, it has a population slightly larger than Baltimore. Before the war, the value of its exports averaged more than eighty million rubles annually. With Bucharest it shared the questionable distinction of being one of the gayest cities of Europe.

is the case with the Great Russian. They have a buoyancy of temperament which leads to a light-hearted gaiety of spirits, such as one does not find among the Muscovites.

THE HOME OF RUSSIAN FOLK-LORE

In so far as outside influences have affected the Slav temperament in the Ukraine, it has been that of the Greek and the Tatar. The warm and bright colors of their costumes are somewhat reminiscent of the Orient. They are great lovers of beads, of which they will wear many strings, and the national costume of the women includes a wreath of flowers worn on the head.

A vein of romance and poetry runs through the Little Russians. It may not be very deep, but it is wide-spread. It is the home of Russian folk-lore. Lyrical ballad and improvised ballad still spring almost spontaneously from the lips of the peasants. Their nature is rather poetical and they are very musical. The love songs of Little Russia are distinguished by their great tenderness. They have songs for all occasions, sacred and profane. They are also great lovers of flowers.

BRILLIANT COLORS MAKE NATIVE COSTUMES A DELIGHT TO THE EYE

The lover of peasant costumes will be in his glory here in the Ukraine. Nowhere in Russia is there so much color in costumes as here, and the general effect is extremely pleasing. The market in Kiev or Kharkov is a study in color.

Red is the prevailing color among the

Photograph by Nevin O. Winter

A RUSSIAN PEASANT GIRL SPINNING: UKRAINE

The women of the Ukraine are especially fond of bright colors, and one of the features of the native costume is the necklace of varihued beads. The industrial development of the Ukraine region has provided a cheap method of producing cloth, so that the home spinning-wheel and the loom gradually began to disappear a decade or more ago.

women, but there are many other bright bits. The costume is also extremely artistic. The red turbans of the women have embroidered borders and their skirts also have a border which reaches almost to the knee. The women generally wear their skirts rather short, scarcely reaching to the ankles—a style becoming more and more popular the world over today. The blouses are made out of pretty patterns, with unique and original designs worked into the material. Even the heavy coats, which they wear for warmth, have their own design, and all will follow practically the same pattern.

Even the men have their little vanity, having their shirts embroidered in red and blue designs, and the younger men have quite a dandified look.

GO BAREFOOTED TO SAVE THEIR BOOTS

Both sexes wear coarse boots, many of them being made of plaited leather, if they are able to purchase them. In summer many will come to the city barefooted, for in that way they save their boots; and leather boots, even in peace times, cost many rubles. In war times they are beyond the reach of the ordinary peasant.

On festive occasions many of the young women are wonderful to behold. They don highly colored dresses and have long bright pink, blue, and red ribbons tied in their hair, which stream behind them as they walk. Oftentimes they wear garlands of real or artificial flowers. Several strings of large and small coral or glass beads complete this pretty outfit; and many of the maidens, with their gypsy-like complexions, look very charming when attired in this manner.

These people have a great love for vivid colors in everything and even decorate their rooms with striped or checked red and white towels. The icon (holy image) shelf is sure to be decorated with these fancy towels and paper flowers. A guest of honor would be given a seat under this little domestic shrine.

KHARKOV, THE SECOND CITY

Kharkov is the second city of the Ukraine and is almost two-thirds the size of Kiev. Its long, broad, and dusty streets, rather roughly paved, are flanked by houses of a nondescript architecture. They are usually two stories high and in colors red, yellow, blue, and magenta stucco predominate.

Huge signboards prevail everywhere in the business section on the stores with samples of the goods sold therein painted upon them. The peasant who cannot read can understand the pictures at least.

The glittering domes of a number of large, flamboyant Orthodox churches give a semi-oriental general effect.

Kharkov's importance is due to the fact that it is the center of a large agricultural district, one of the most fertile sections in all Russia.

There is a very large bazaar here, which draws thousands of visitors on several occasions during the year. It is a great distributing center for agricultural supplies and is also quite an educational center, with one of the greatest universities in all Russia.

ODESSA, CATHERINE THE GREAT'S CREATION

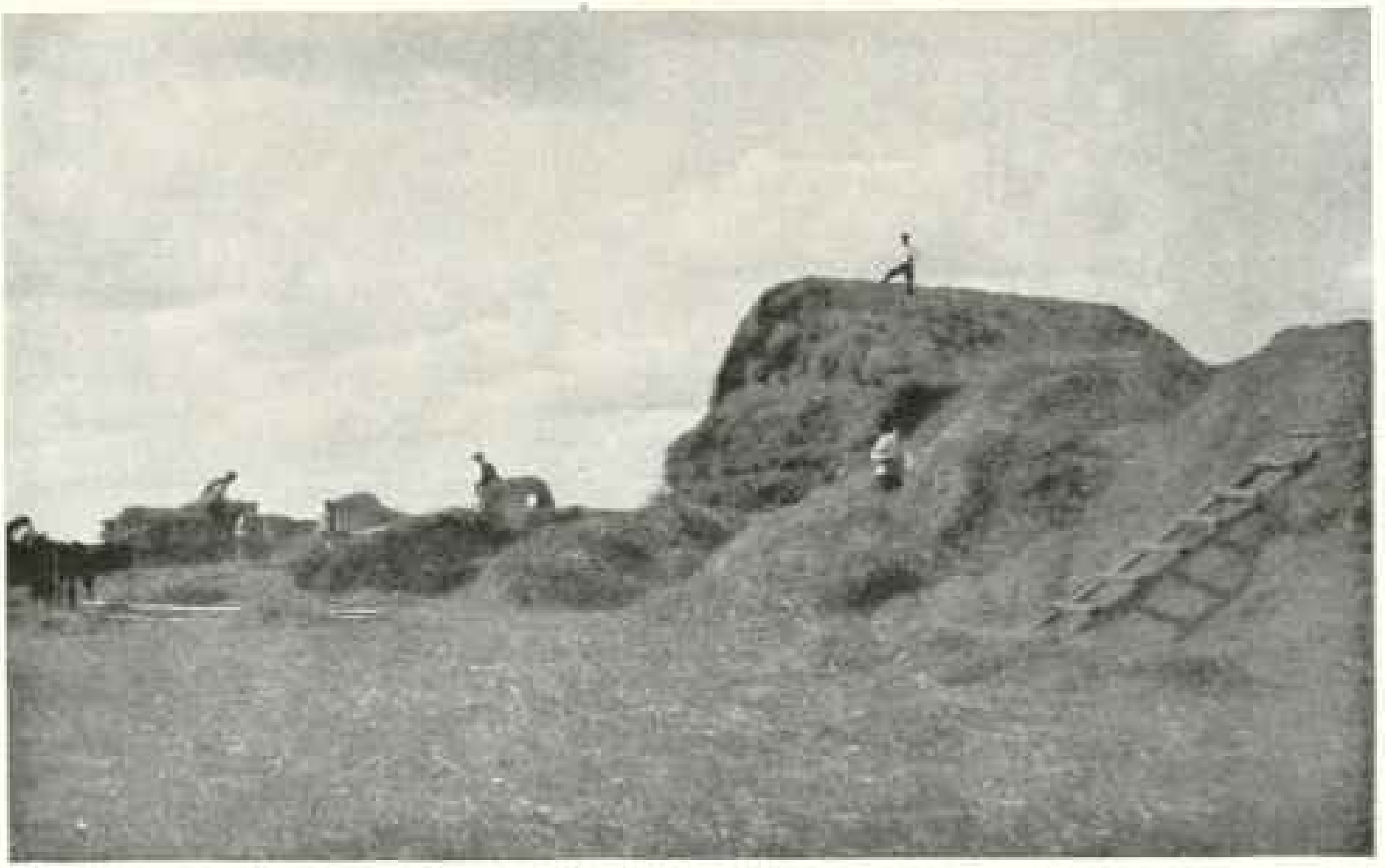
By the new alignment Odessa and the province of Kherson have been added to the Ukrainian Republic. This city of half a million is one of the newest cities in Europe. While Moscow can boast of a thousand years of history, Odessa is only a little over a hundred years of age. Its rapid growth will compare with the cities of the new world. It dates from 1794 and it owes its existence to Catherine the Great. Just a few years before that this territory had been ceded to Russia by Turkey. Her purpose was to establish a strong city as near to Constantinople as possible. A magnificent statue of the empress, representing her as trampling the Turkish flag scornfully beneath her feet, now adorns one square.

Odessa is not a typical Russian city. Mark Twain said that the only thing truly Russian about it was the shape of the droshkis and the dress of the drivers. One might add the gilded domes of a few churches. It is an attractive city in many ways and it has the reputation of being a very fast city. It has been in recent years a very important post.

The business of the city is largely in the hands of the Jews, who comprise a third of the population. There has not

A TYPICAL VILLAGE PRIEST: RUSSIA

What the attitude of the Ukrainian Government will be in matters of religion is as yet conjectural. The revolutionary movement throughout Russia as a whole has been anti-clerical. The Russian peasant, however, is innately devout.



Photograph by Nevin O. Winter

THE GREAT STACKS OF STRAW LEFT AFTER THRESHING: UKRAINE

It was the vast, grass-covered steppes which first attracted the roving Cossacks to the Ukraine. These same steppes, when put under cultivation, yield bountiful harvests of wheat. It was on Ukrainian grain that Germany expected to feed her millions after the treacherous treaty of Brest-Litovsk, which was designed to dismember the Russian Empire and leave it helpless in the hands of the despoilers.

Photograph by Nevin O. Winter

A GROUP OF RUSSIAN FORESTERS

In centuries past there were magnificent forests of vast extent in the northern section of the Ukraine, but the trees have gradually disappeared. Reforestation is one of the obligations resting upon this people when peace again comes to them.

been the best of feeling toward them by the Orthodox population and a terrible massacre occurred in 1905. It has always been a stirring revolutionary center and has caused the imperial government much trouble in the past quarter of a century.

KIEV, THE HOLY CITY OF THE UKRAINE

Kiev is the holy city of the Ukraine and hundreds of thousands of pilgrims visit it each year. The natural landscape is heightened at all times in its pictorial effect by the picturesque groups of pilgrims, staves in hands and wallets on backs, who may be seen clambering up the hills, resting under the shadow of a hill, or reverently bowing the head at the sound of a convent bell.

Here is the story as it is recently related by Russian chroniclers. A thousand years ago, or thereabouts, a very holy monk, named Anthony, came to

A PEASANT HOUSE IN THE UKRAINE: RUSSIA

The villages of the Ukraine do not cluster about some feudal château or nobleman's castle, as in many of the other countries of Europe; they are usually planted in the lee of some swell in the surface of the steppes, or beside a stream where the flocks of the peasants may find water in the dry season.

Photographs by Nevin O. Winter

HARVEST TIME IN THE UKRAINE

The characteristic big wooden yoke and low-hung shafts identify this vehicle at once as Russian. The undulating plains of the Ukraine, once a pasture-land only, now yield bountiful crops of grain.

Photograph by Nevin O. Winter

UKRAINIAN PEASANT WOMEN IN THE STREETS OF KHARKOV: RUSSIA

In summertime these countrywomen come to the city barefooted in order to save shoe leather, which is very expensive in a land that annually exports hundreds of thousands of hides in times of peace.

Kiev and dug a cell for himself in the hill. The devout life of this monk soon drew other holy men around him, and all at first made their homes in the caves. It is said that many of the early monks never again emerged into daylight after they once entered the caves. Some shut themselves up in niches and remained self-immured the rest of their days, living on the food placed there each day by their brothers. When the food remained untouched, the monks knew that a saintly spirit had fled. The place was then walled in, and the niche remained the monk's home after as well as before his dissolution.

KIEV'S GHASTLY CATACOMBS

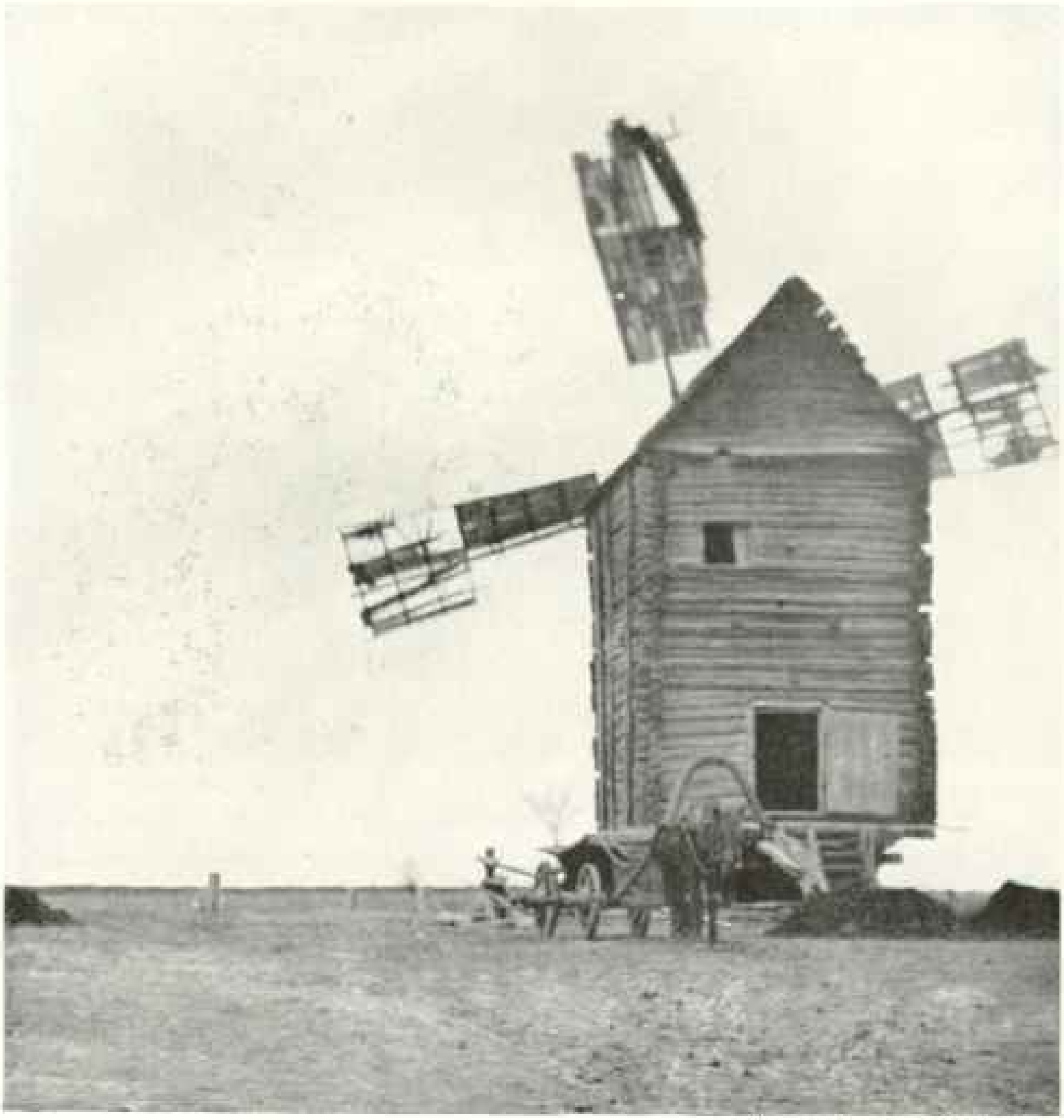
The catacombs are indeed ghastly to visit, for there are rows upon rows of skulls in them. Access is had by narrow steps, and then through labyrinthine subterranean passages one descends deeper and deeper into the bowels of the earth, winding hither and thither along a pathway. Finally there begins a series of niches, in which repose the bodies of the saintly recluses.

The pilgrims pass each holy tomb, reverently kissing the shriveled hands laid out by the monks for that purpose. They do not distinguish between the holy and the holier, but pay a tribute to each one impartially in order to conciliate all.

Much contagion must be spread by this unsanitary method of homage. No doubt many an infection, and possibly even a great pestilence, could be traced directly to this spot, where the indiscriminate osculation of church relics is observed.

ICON RECEIVES 100,000 KISSES A YEAR

The Cave Monastery, or Pechersky Lavra, is a large stone structure on the hill, at a little distance from the city, and is surrounded by a high stone wall. It is



Photograph by Nevin O. Winter

AN OLD WINDMILL OUT ON THE STEPPE: UKRAINE

The windmill is a landscape feature as characteristic of the Ukraine as of Holland; but the mills of this region are not nearly so picturesque as those kept in perfect repair by the thrifty Dutch. Many of the Ukrainian structures seem ready to fall to pieces, and they are seldom painted. Their mission is to grind the grain in a country which is so flat that there is no such thing as water-power.

entered through a holy gate. Each monk has his own apartment, with a little garden attached. Several hundred monks live in the monastery and a number of lay brethren are also allowed to dwell there.

In the principal church is preserved a miracle-working icon, known as the Death of Our Lady. It was brought from Constantinople and has received no fewer than a hundred thousand kisses a year. It is painted on cypress wood, now black with age. Every line of the picture is marked by precious stones and each head has a halo of brilliants, while an enormous diamond glitters above the head of Christ.

The wealth of the Lavra at Kiev is

Photograph by Nevin O. Winter

A LANDLORD CROWNING RUTHENIAN PEASANT GIRLS IN A HARVEST CEREMONY

The four million Ukrainians who live in the province of Galicia, under Austrian sway, are called Ruthenians.

enormous. Each successive Czar has visited it not infrequently and always gave a large donation.

What the attitude of the new leaders of the Ukraine toward this monastery will be remains to be seen. The revolutionary movement as a whole has been anti-clerical and shows a revolt against the former influence of the church in Russia.

The monks do not live the ascetic lives of their ancestors, although the food still seems plain. Coarse bread is always served, fish frequently, but meat and wine are not unseldom. One monk always reads from the lives of saints while the others eat. The monks seat themselves on benches and they eat off pewter platters. There is an inn at which many stop who can pay, but the fare is too plain for most people. Then there is also a free lodging quarter, where the poorer ones

Photograph by Nevin O. Winter

PILGRIMS ON THEIR WAY TO KIEV, THE HOLY CITY OF THE UKRAINE

According to legend, Kiev is "the mother of all the towns of Russia." It was the capital of St. Vladimir, who, in the year 988, established the Greek church as the State religion. A monument to this ruler was erected in the city in 1853, representing him baptising the Russian people. Kiev has been a religious center since his day.

can stop without charge. Sour black bread and boiled buckwheat groats is about the only food provided for this class of pilgrims.

PILGRIMS SHARE THEIR FLEAS WITH ALL

Many peasants will travel on foot for days and spend almost their last kopeck for the sake of visiting this sacred monastery in the holy city of Kiev. Sienkiewicz makes one of his principal characters say when faced with danger: "I shall die and all my fleas with me." These pilgrims certainly bring theirs with them to Kiev and share them freely with any one with whom they come in contact.

It would be difficult to find a larger or more varied collection of professional or casual mendicants anywhere than congregate here at Kiev during the pilgrimage period. Dressed in rags and wretchedness, these mendicants expose revolting sores and horrible deformities in order to excite sympathy. Some appear to enjoy vested rights in particular locations. Many might be classed as pious beggars and have an almost apostolic appearance, with their long beards and quiet bearing. All of them may be worthy objects of charity, but the Russian beggars are most importunate.

RUSSIAN PEASANTS EXTREMELY CHARITABLE

The Russians themselves are very charitable toward the unfortunate class. Poor peasants, themselves clothed in rags, will share their little with those poorer than themselves.

A foreigner, knowing the poverty of the people and the inadequacy of public relief, cannot but feel kindly disposed toward those who are really helpless. Here, as elsewhere, however, it is difficult to distinguish between the unworthy and the deserving.

THE ACORN, A POSSIBLY NEGLECTED SOURCE OF FOOD

By C. Hart Merriam

Formerly Chief of the U. S. Biological Survey

IN VIEW of the present pressure on the food supply of the United States, and with special reference to the universal effort to reduce the consumption of wheat by the substitution of corn meal, bran, and other cereal products, it may be worth while to call attention to the high nutritive value of a wholly neglected food of wide distribution. I refer to the acorn.

There are in the United States more than 50 species of oaks, of which 30 occur in the Eastern States and about 15 in the single State of California.

To the native Indians of that State the acorn is, and always has been, the staff of life, furnishing the material for their daily mush and bread. And when it is remembered that the Indian population of California at the time of its discovery numbered probably not less than 300,000 persons, and that from the Oregon boundary to the Mexican line, except in the desert region, where oaks do not grow, acorns were universally eaten, and in most cases were the principal article of diet, some idea may be had of the vast quantity and high food value of those annually consumed.

In the fall, when the acorns are ripe, the Indians gather them and spread them out to dry in the sun, and when thoroughly dried store them in large baskets and wickerwork caches, sometimes in trees, but usually on rocks or poles.

These receptacles are built to shed the rain and to keep out rats and mice, but are sufficiently open to permit the circulation of air, thus avoiding the danger of molding.

Another and very different way of preserving acorns, practiced by the Wintoon Indians of western Tehama County, in California, was described to me by F. B. Washington, of Oakland. The acorns were buried in boggy places near cold springs, where they became swollen and softened and turned nearly black in color, but remained fresh for years. When needed they were dug out and *roasted*, never dried or pounded for flour, the mush and bread being always made of dried acorns.

White men in plowing have opened up caches of acorns that had lain in these cold, boggy places for fully 30 years, and found the acorns black, but still good.

When preserved dry in the usual way, the acorns are shucked as needed, and the dry meats, each splitting naturally in two parts, are pounded in stone mortars until reduced to a fine meal or flour. This at first is disagreeably bitter, but the bitter element is removed by leaching with warm water, which in seeping through acquires the color of coffee and the bitterness of quinine. The meal is then dried and stored to be used as required, for mush or bread.

According to V. K. Chesnut, the Indians of Round Valley, California, sometimes practice another method of getting rid of the bitter element, namely, by burying the acorns with grass, ashes, and charcoal in a sandy place and afterward soaking them in water from time to time until they become sweet.

BOILED IN BASKETS BY USE OF HOT STONES

The ordinary method of cooking is by boiling in baskets by means of hot stones, the result being a thick jelly-like mush or porridge. Acorn flour makes a rich, glutinous food and contains a surprisingly large quantity (18 to 25 per cent) of nut oil of obvious nutritive value.

Mrs. Merriam tells me that it is easy to work, being what cooks call a "good binder," which means that it holds together well even when mixed with several times its bulk of corn meal or other coarse or granular materials.

Mush and bread made wholly of acorn flour are not pleasing to our taste, but

Photograph by C. Hart Merriam

INDIAN WOMAN OF THE CHUKCHANSY TRIBE, NEAR FRESNO FLAT, CALIFORNIA, SHUCKING ACORNS

Note the newly gathered acorns of the black oak in the carrying basket, the flat stone upon which the acorn is poised, and the small stone in the right hand with which it is split. The picture shows also one of the flat, circular winnowing baskets in which the acorn meal is agitated to separate the fine from the coarse, and a bowl-shaped basket in which the acorn mush is cooked. The work is done in a small opening in the manzanita bushes adjacent to the Indian's home.

leached acorn meal mixed with corn meal in the proportion of one part acorn to four parts corn makes excellent corn bread and pones, and mixed with white flour or whole-wheat flour in the same proportion makes palatable bread and muffins, adding to the cereal value the value of a fat nut product.

I have often eaten the pure acorn mush and bread as made by the Indians, but prefer the mixed product above mentioned. John Muir, during his arduous tramps in the mountains of California, often carried the hard, dry acorn bread of the Indians and deemed it the most compact and strength-giving food he had ever used.

Another kind of bread was made by the Indians of Sacramento Valley. The eminent geologist, James D. Dana, who traversed the valley with the Wilkes Expedition in 1841, said: "Throughout the Sacramento plains the Indians live mostly on a kind of bread or cake made of acorns . . . kneaded into a loaf about two inches thick, and baked. It has a black color, and a consistency like that of cheese, but a little softer; the taste, though not very pleasing, is not positively disagreeable."

Chesnut tells us that this kind of bread usually contains a red clay which is mixed with the dough before baking, in the proportion of one part clay to 20 of acorn dough. It is then embedded in leaves and baked overnight on hot stones, either in the cooking hole in the ground or covered with earth and hot stones.

"When removed the next morning the bread, if previously mixed with clay, is as

Photograph by H. W. Henshaw, from C. Hart Merriam

DIGENO INDIAN WOMAN POUNDING ACORNS AT SANTA ISABEL, SOUTHERN CALIFORNIA

The picture shows plainly the ring of partly ground acorns which always rises about the rims of these mortar holes in the solid rock. It shows also the method of holding the heavy stone pestle, and some of the acorn baskets.

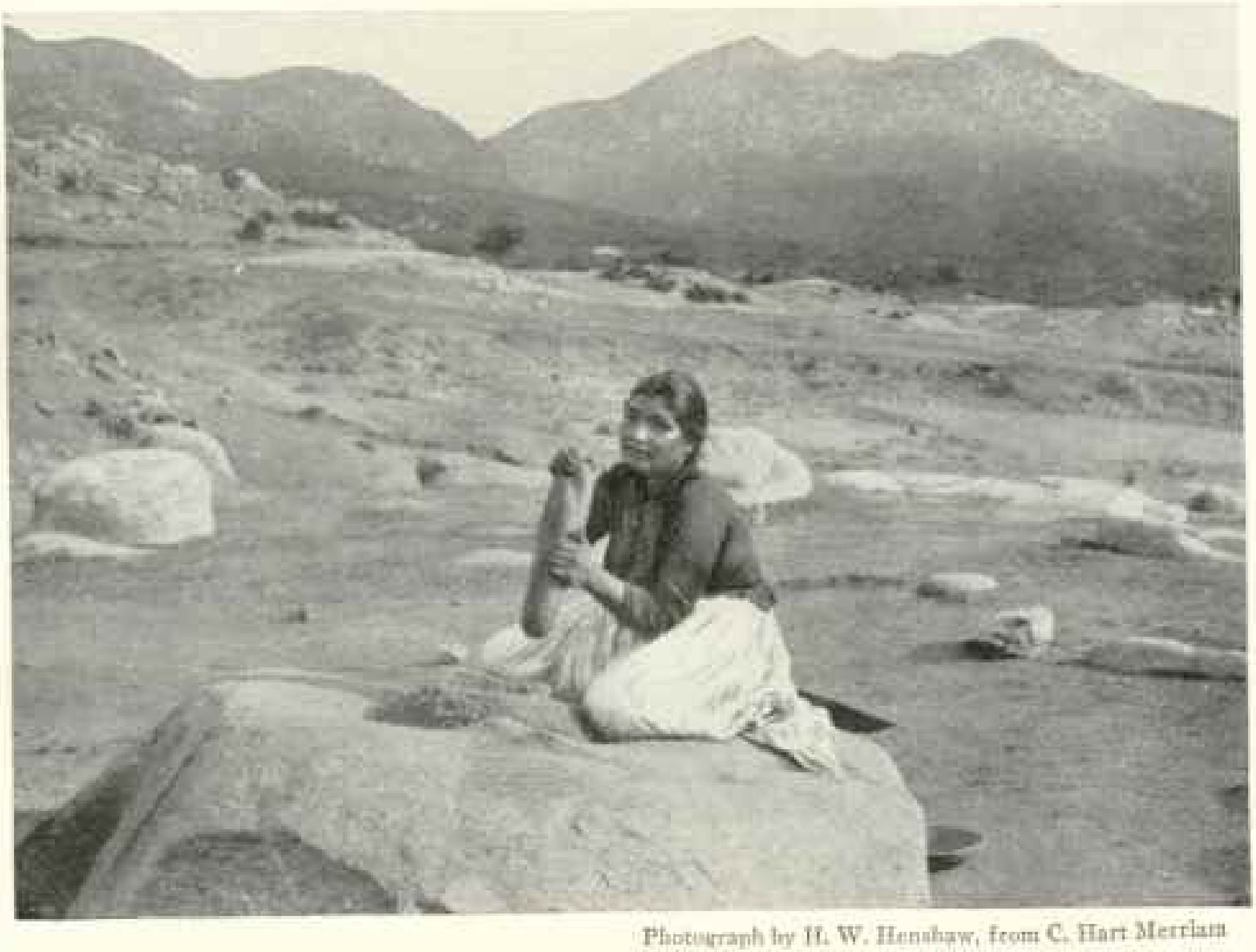
black as jet, and while still fresh has the consistency of rather soft cheese. In the course of a few days it becomes hard. . . . It is remarkable for being sweet, for the original meal, and even the soup, are rather insipid. The sweet taste is very evident, and is due in great measure to the prolonged and gentle cooking, which, favored by the moisture of the dough, gradually converts some constituent of the meal into sugar."

Chesnut adds that the clay really serves a useful purpose, converting any tannin still remaining in the dough into an insoluble form, thus removing the indigestible element. He states further that bread made in the same way, but without the clay, is likewise sweet, differing only in color, the color varying from light tan to dark reddish brown.

The quantity of acorn meal cooked and eaten by Indians is almost beyond belief. At a ceremony for the dead, held near Bald Rock, Tuolumne County, California, in early October, 1907, the preparation of the acorn food for the mourners and guests was begun several days in advance. Two cooking places and five leaches, each about 4 feet in diameter, were in active operation for several days.

On the opening day I counted at the cooking places about 50 huge baskets, each holding from one to two bushels, full of freshly cooked acorn mush (*nup'-pah*). The mush is so heavy that the services of two strong women were required to lift each basket and place it in the large conical burden basket on the back of a third woman, who slowly carried it to the roundhouse where the ceremony was held.

In addition to the mush, there were at least 50 turtle-shaped loaves of acorn bread (*oo-lay'*), made by dipping out the



Photograph by H. W. Henshaw, from C. Hart Merriam

INDIAN WOMAN POUNDING ACORNS AT AGUA CALIENTA, IN WARNER VALLEY, SOUTHERN CALIFORNIA

Note the elevated rim of partly ground acorn meats surrounding the mortar hole

hot mush in a special basket and plunging it (turning it out of the basket) into a cold, running stream.

The action of the cold water, curiously enough, causes the loaves to contract and harden. They are then placed on rocks to drain, and in the course of a few days become dry and hard and may be carried for weeks, until consumed.

The total quantity of acorn mush and bread made for this ceremony must have exceeded a ton in weight.

In some parts of California the Indians husk the acorns as soon as ripe, without waiting for them to dry. The shells, being at that time somewhat flexible, cannot be easily cracked with the cracking stone, but are torn open with the teeth.

INDIANS ESTABLISH ACORN CAMPS IN AUTUMN

A very intelligent full-blood woman named Che-na-wah Weitch-ah-wah, belonging to the *Po-lik-lah* or lower Klamath tribe, writes that in her country when the acorns ripen, in late October and in November, the families establish acorn camps in favorite localities, gathering and bringing in the nuts in the large burden baskets. In the evening, when the evening meal is finished, all the family—men, women, and children—engage in removing the hulls with their teeth, an occupation at which they are very expert. The hulled green acorns are put into large, flattish circular receptacles of basket work, which are placed on top of a high frame over the fire in the house, so that the heat in rising dries them.

All acorns are not equally desirable from the food standpoint. Of the edible qualities of the numerous eastern species I have no personal knowledge, though it is well known that acorns of several species were eaten by various eastern tribes from Canada to the Gulf of Mexico.

It is known that the Algonkin tribes

of our Eastern States used acorns for bread and for oil, and mixed boiled acorns with their fish and meat.

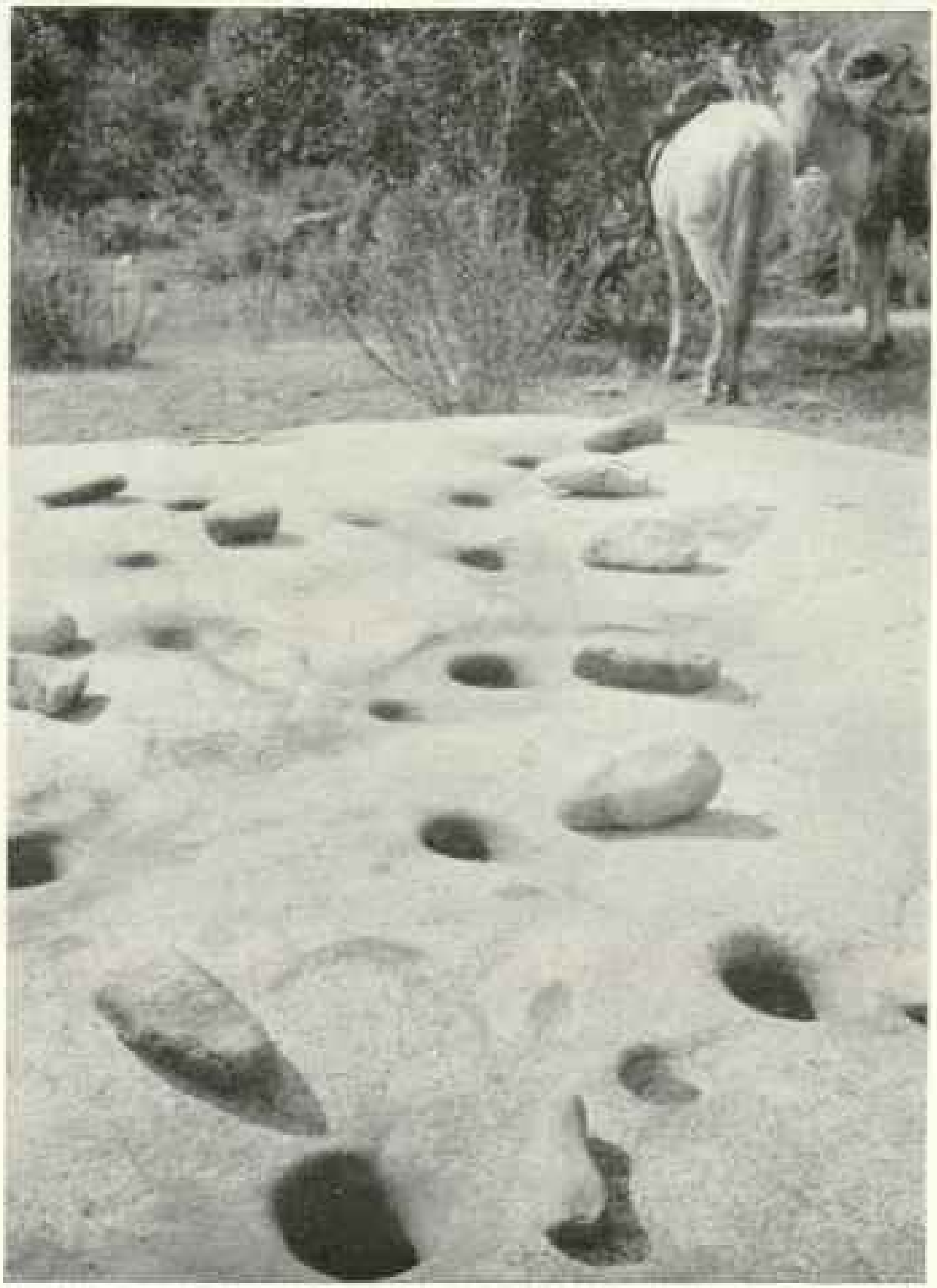
The Iroquois of the State of New York, according to F. W. Waugh, commonly made use of acorns for food, apparently favoring the sweet kinds, as those of the white and chestnut oaks, but in times of necessity resorted to the bitter acorns of the black and red species.

Waugh states further that nut meats (presumably including acorns) were pounded, boiled slowly in water, and the oil skimmed off into a bowl; the oil was boiled again and seasoned with salt, to be used with bread, potatoes, pumpkins, squashes, and other foods, and nut oil was often added to mush. The meats left after skimming off the oil were seasoned and mixed with mashed potatoes, and nut meats were crushed and added to hominy and corn soup to make it rich.

And the Hurons of eastern Canada, according to the Jesuit Relations, prepared the acorns by "first boiling them in a lye made from ashes, in order to take from them their excessive bitterness." Another way was by boiling them in several waters.

During the famine winter of 1649-1650, after the Hurons, defeated by the Iroquois, had taken refuge on the Island of Saint Joseph, at the north end of Lake Huron, the Jesuits of the Mission at that place "were compelled to behold dying skeletons eking out a miserable life: . . . the acorn was to them for the most part what the choicest viands are in France."

The Jesuits, before the snow had covered the ground, had bought 500 or 600 bushels of acorns, and had dispatched several canoes to procure a supply of fish from the Algonkin tribes 60 to 100



Photograph by C. Hart Merriam

ANCIENT ACORN MORTAR HOLES AND PESTLES IN SOLID GRANITE, NEAR KAWEAH RIVER, CALIFORNIA

These ancient grinding mills in hard granite rock are common on the middle and lower slopes of the Sierra Nevada of California and some of them have as many as 20 or 30 mortar holes. The pestles are large and heavy with smoothly rounded striking ends and are held in both hands; the *modus operandi* is illustrated on pages 131 and 132. When pounding the acorns, several women usually work together, sitting at neighboring holes and singing in rhythm with the strokes of the pestles.

Photograph by C. Hart Merriam

OPEN-AIR KITCHEN, WHERE THE ACORN MEAL IS LEACHED AND COOKED

Beyond the leach is the fire, covered with stones which are being heated to cook the mush in the baskets on the left. The leach is a low, concave mound of dry debris gathered under the manzanita and lilac bushes, consisting mainly of dead and broken leaves and bark, which together form a porous bedding through which the water easily finds its way. The leach is lined with a fiber mat, or cloth, and the branch of an evergreen tree is laid on the meal to catch and spread the water so that it will not dig into the meal. Used by the Mewuk Indians of the Sierra foothills region, California.

leagues away. But the quantity of food obtained proved insufficient, and early in March the famished Hurons were compelled "to go in search of acorns on the summits of mountains which were divesting themselves of their snow." These poor Indians were drowned by the sudden breaking up of the ice on the lake (Jesuit Relations).

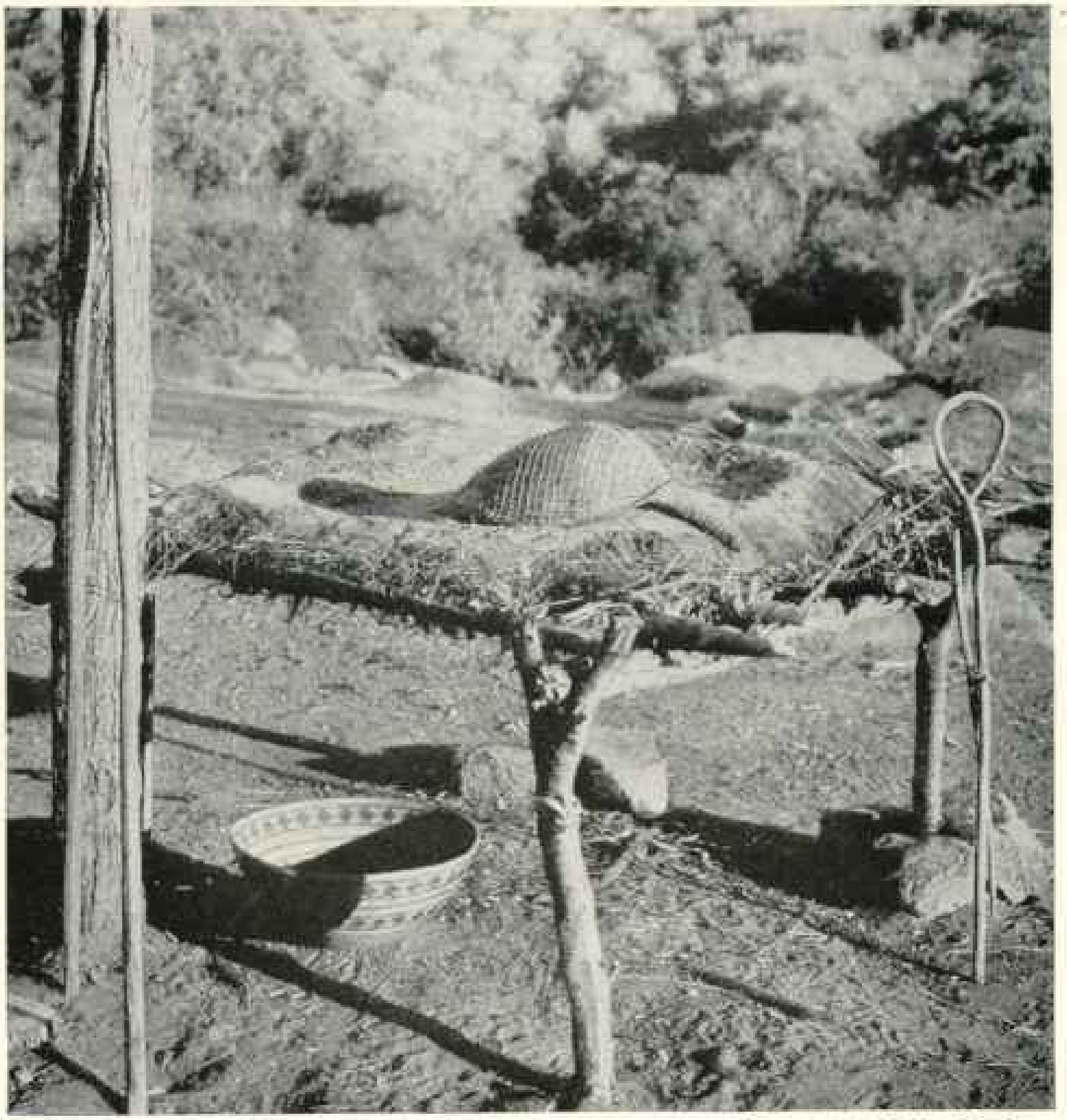
USE OF ACORNS IN SOUTHERN STATES

The Choctaw, of Louisiana, according to David Bushnell, used to make flour by pounding the acorns of the water oak in a wooden mortar, when the meal was leached, by putting it into an openwork basket and pouring water through several times. It was then boiled or used as corn meal.

In the Southern States, where more than 20 species of oaks occur, and in parts of Mexico, acorns are sometimes eaten by the people, and they are relied upon to supply the principal food of the countless thousands of hogs that roam at will through the glades and forests, thus contributing materially, albeit indirectly, to the support of the population.

And there is every reason to believe that a fair proportion of the species might be utilized with advantage to vary or supplement the daily diet of the people. This would be especially desirable in the case of the ill-nourished poorer classes—those subject to the inroads of hook-worm and pellagra.

In California the relative merits of the different kinds are well known. At middle elevations in the interior of the State the fruit of the black oak is the favorite, while in the humid coast belt that of the tanbark oak is most prized. Besides



Photograph by C. Hart Merriam

ANOTHER TYPE OF LEACH, MADE BY THE WUKSACHE INDIANS OF ESHOM VALLEY

This leach consists largely of sand placed on a bed of dry, dead leaves and twigs supported on a square framework of poles. The looped stick resting against the leach is used for stirring the hot stones in the basket while the cooking is going on.

these, the fat acorns of the blue oak of the dry foothills and the elongate ones of the valley oak of the bottomlands and adjacent slopes are gathered and consumed in large quantities; and in years when the nut crop of the favorite species fails, most, if not all, of the others are turned to account.

Even at the present time hundreds of bushels of acorns are annually gathered and eaten by California Indians; but the quantity consumed by the white population is negligible, the main part of the crop (amounting to thousands of bushels) being devoured by hogs, bear, deer, squirrels, and other animals or allowed to go to waste on the ground.

ACORNS AS A BREAD SUBSTITUTE IN EUROPE

In the old world the utilization of acorn food for man and beast dates from

Photograph by H. W. Henshaw, from C. Hart Merriam

POMO INDIANS SHUCKING AND DRYING ACORNS, NEAR UKIAH, IN RUSSIAN RIVER VALLEY, CALIFORNIA

The split meats may be seen spread out to dry on cloths on the ground and also on an elevated platform alongside the house. One of the large carrying baskets in which the acorns are gathered stands near the door.

very ancient times, and notwithstanding the importance of the wood for timber and fuel, and of the bark for tanning, acorn mast was long considered the most valuable product of the oak forests.

In England, France, and Italy, during periods of food scarcity, boiled acorns were used as a substitute for bread; and in most of the Mediterranean countries the sweet fruit of *Quercus esculenta* (mind the name) is still prized by the inhabitants. In Algeria and Morocco the large acorns of an evergreen oak are eaten both raw and roasted, while in Spain those of the Gramont oak are regarded as even superior to chestnuts.

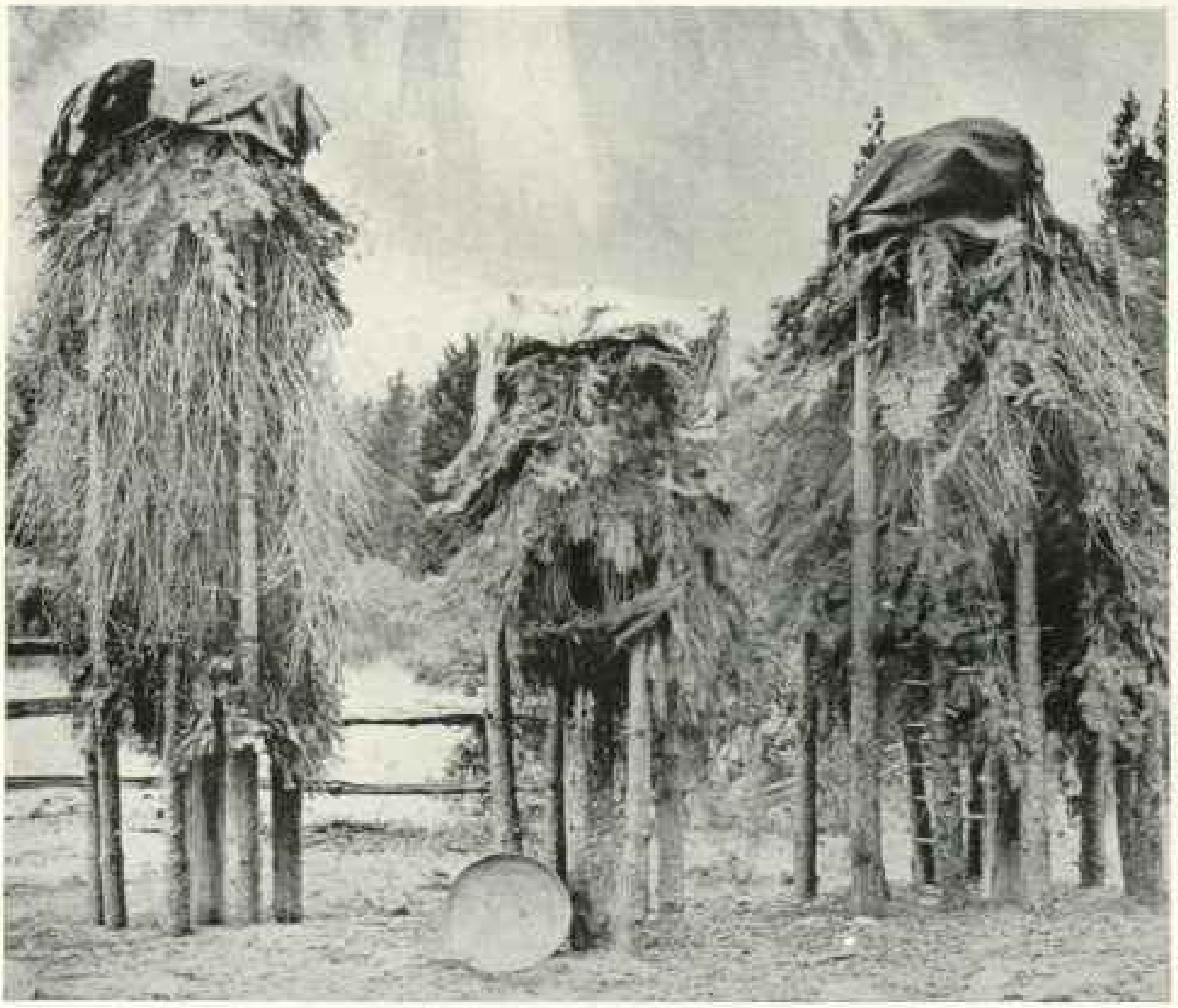
V. K. Chesnut quotes Giovanni Memmo to the effect that in Spain and Italy sometimes as much as 20 per cent of the total food of the poorer people consists of sweet acorns. But as the indigestible tannin is not removed, it has been found that 10 per cent of the acorns pass away undigested. The superiority of the methods employed by our Indians is obvious.

That a food of such genuine worth should be disregarded by our people is one of many illustrations of the reluctance of the white man to avail himself of sources of subsistence long utilized by the aborigines.

We seem to prefer crops that require laborious preparation of the soil, followed by costly planting and cultivation, rather than those provided without price by bountiful nature.

COMPARATIVE ANALYSES OF CORN MEAL, WHEAT FLOUR, AND ACORN FLOUR[1]

	Corn meal	Wheat flour	Acorn flour[2]	
			Leached	Unleached
Water	12.5	11.5	11.34	5.82
Ash	1.0	.5	.29	1.90
Fat	1.9	1.0	19.81	25.31
Protein	9.2	11.4	4.48	5.44
Carbohydrates	74.4	75.4	62.02	59.62
Fiber	1.0	.2	2.06	1.91



Photograph by C. Hart Merriam

ACORN CACHES IN YOSEMITE VALLEY

The outer covering is of branches of fir, cedar, and pine, closely appressed, with the tips directed downward to keep out the rain and the native rats, mice, and squirrels. The interior lining is mainly of the long, slender branches of *Hosackia* or *Lotus*.

While on the subject of Indian foods, it may be mentioned that the nutritious nuts of the sugar pine and digger pine and the berries of certain species of manzanita are much used by California Indians; that the seeds, roots, and fruits of numerous other plants form valued additions to the diet, and that in times of scarcity the nuts of the California laurel and buckeye, of which hundreds of bushels may be had, are so treated as to be edible.

In the arid mountains of the desert region east of the Sierra the rich oily nut of the pinyon or nut pine takes the place of the acorn as the dominant element of the food supply; and in certain canyons bordering the Colorado desert the same may be said of the native date, while in the open deserts the mesquite bean is the staple commodity.

[5] For these tables I am indebted to the U. S. Food Administration. The analysis of acorn flour was kindly made by Dr. J. A. Le Clerc, of the Bureau of Chemistry, U. S. Dept. of Agriculture.

[6] This acorn flour was made from the California black oak (*Quercus californica*) and is very old, having been obtained by me from the Mewuk Indians at Oleta, in the middle Sierra foothills, 12 years ago. As a result it is exceedingly dry and without doubt has lost much of its protein. An interesting comparison may be made with an analysis, by Charles D. Woods, of acorn flour from the California Valley white oak (*Quercus lobata*), which yielded: Water, 8.7; ash, 2.0; fat, 18.6; protein, 5.7; carbohydrates, 65.0. This meal (unleached) contained 0.63 per cent of tannin. The large percentage of fat in both kinds shows their extraordinary richness in nut oil and consequent high fuel value.

Photograph from Alice Rohe

THE MORNING CALL OF THE MILKMAID IN SAN MARINO

Early each day, peasant girls climb Monte Titano from the sloping farms below, carrying woven baskets of straw in which are packed bottles of milk. When the price of milk reached 50 centimes (10 cents) a quart recently there was a national scandal.

OUR LITTLEST ALLY

By Alice Rohe

RISING sheer and majestic from the plains of Romagna, an imposing mountain dominates the landscape from Rimini to the distant rolling hills and peaks of the Apennines.

Atop this great rock, whose serrated flanks and menacing heights seem inaccessible, three towers soar in picturesque silhouette against the sky-line.

The nearer approach over ever-upward roads, ascending from the Adriatic toward this giant mount, brings increasing doubt as to its accessibility.

It is Mount Titanus, and the towers piercing the blue sky are the famous "Penne" of San Marino, the littlest Republic in the world, the land of perpetual liberty, of hereditary peace.

An eminence well worth the struggle to reach in these war-tortured times!

Austrian dirigibles soar above Rimini, its nearest railway connection, 13 miles away, dropping their destructive bombs; but the Land of Peace stands calm and unafraid, wrapped in the undisturbed autonomy of sixteen centuries.

The entire landscape to south and west is marked by mounts and peaks capped with medieval towers, bringing to mind those illustrated fairy tales of childhood, with their deeds of wickedness and chivalry. Legends and fairy tales indeed are interwoven in this marvelous panorama: but history, too—history of violent and bloody warfare — rises phantom - like about those warning heights. They are the towers of the Malatesta, and from Rimini, past Verruchio, where these tyrants first established their lordship, to right and left of the river Marecchia, their story is written before San Marino.

THE MOUNTAIN OF THE TITANS

But long before the Malatesta began their cruel sway, Mount Titanus had its place in the dawn of story, for it is no other than that famed mountain of mythology which the angry Titans raised in their efforts to reach Jove and drive him from his throne.

Having left Rimini, with its stern reminders of war in air and sea, its sandbagged cathedral, temple of Sigismondo Malatesta, miles behind, the country of peace becomes an inspiring goal.

The frontier is crossed with scant formality. Serravalle, largest of the castelli, or towns, of the Republic, first stop on San Marino soil, is passed, and the Borgo, nestling at the foot of the foreboding-looking mountain, shows quaintly narrow streets and arched loggias, as the courageous auto plunges determinedly up that precipitous drive.

At last it stops before an ancient gateway, where all passengers must descend. Then through its massive arch, up a steep, narrow street, the way leads with many turns, past little squares and market-place, to the cherished spot of the Sammarinesi, the Pianello, Piazza della Liberta, with its statue of Liberty in the center. Here is the government palace, modern edifice of fourteenth century architecture. Here are the postal and telegraph offices and the Tribunal. Doves, fitting symbols, flutter about the palace, descending to get their daily food from the natives; then flying away to rest beneath the statue of San Marino, standing guard over his Republic, from the palace angle. Before the wall, which seems to protect the promenaders from falling into the depths below, a view of unusual loveliness is unfolded.

A PANORAMA OF UNSURPASSED SPLENDOR

But it is from the "Rocca," the ancient fortress, still higher, ever higher, that a panorama of unsurpassed splendor is revealed—mountains and peaks, sea and plain, white ribbon-like roads winding through level and height toward distant parts. Ranges of mountains roll wave-like away into the horizon. Carpegna, cradle of the counts of Montefeltro, later dukes of Urbino, looms majestically. To the left a black streak against the horizon marks Ravenna's famed Pineta, or Pine Forest. Again one sees Rimini and

Photograph from Alice Rohe

EMPTYING WINE CASKS AT THE GATE OF SERRAVALE: SAN MARINO

As these splendid animals attest, stock-raising is the principal occupation of the Sammarinesi, but the cultivation of vineyards is a close second. Even the poorest peasant crushes his grapes and makes his wine.

the sea, and through the clear air the gaze crosses the Adriatic and discerns the faint outline of Dalmatia, the land from which came that pious stone-cutter, founder of the Republic, the land of liberty and peace—Marino.

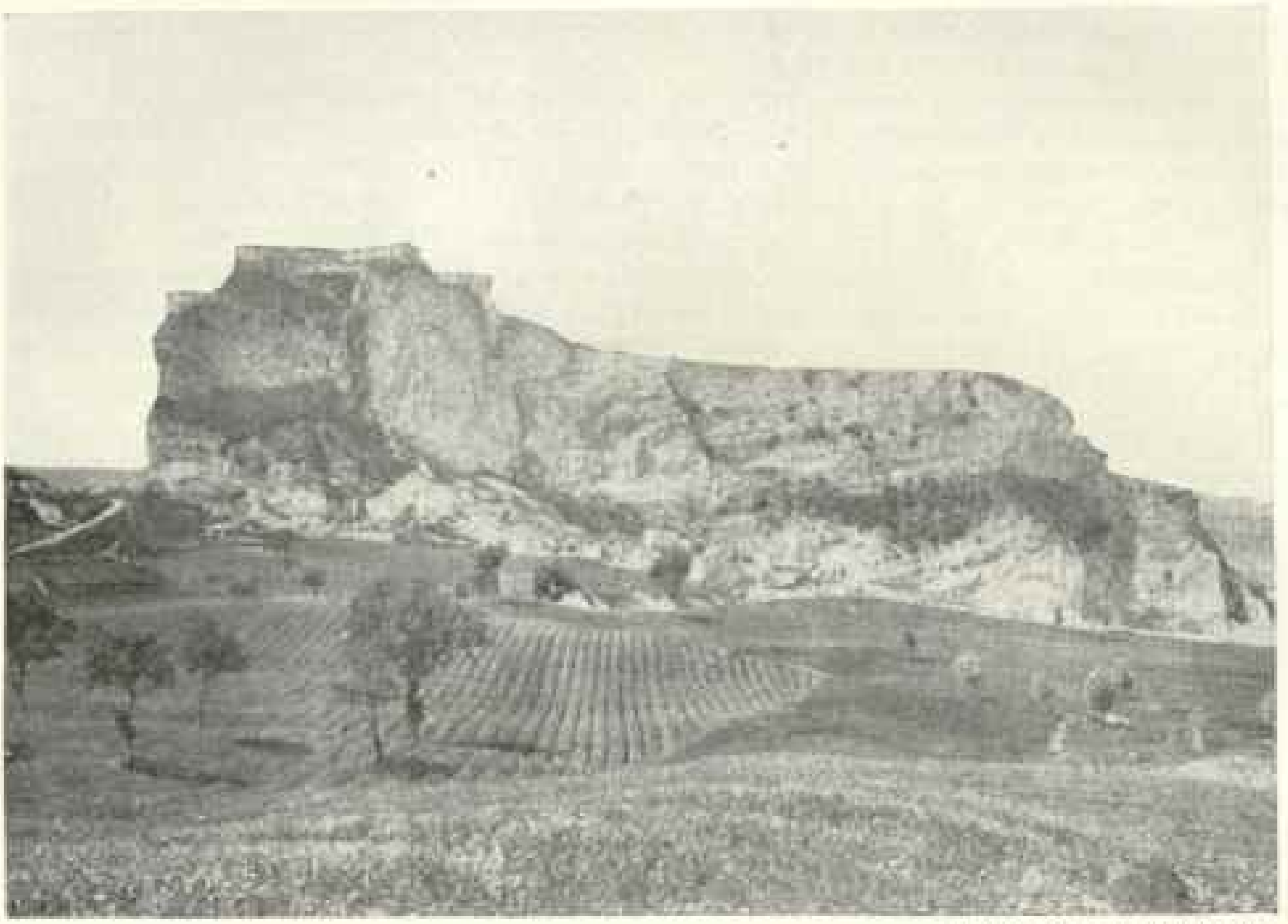
But nearer at hand, so close that it seems as if one could almost call across, though it is six miles distant, the most compelling of all San Marino's mountainous neighbors holds the attention. It rises abruptly from the rolling hills, another seemingly inaccessible and impregnable rock, with a formidable fortress menacing the landscape from its precipitous height.

This is San Leo, whose history, interwoven in primitive times with that of San Marino, is of especial interest, in the light of the littlest Republic's diverging line of development. War and tyranny ever disturbed the inhabitants of San Leo, while peace and liberty blessed San Marino. Tradition says the reason was that the body of San Leo was removed from the country, while that of San Marino remained—a powerful and venerated relic. San Leo's grim fortress has been the scene of dark deeds during the successive political wars and the varied turbulent epochs of Italian history. Among its famous and infamous prisoners was Cagliostro, who died after six years of suffering, in solitary confinement.

ITALY HONORS THE LITTLE REPUBLIC IN ITS MIDST

It is on the highest point of the Republic, 2,500 feet above sea-level, looking from San Leo out over the scenes of violent history, that the story of San Marino becomes picturesquely vital. Battles and discords have rolled for centuries about its feet, war has engulfed it, even as today, and even as today it has maintained its independence, its liberty, its heritage of peace.

The position of San Marino, 13 miles from Rimini, is singular. This little Re-



Photograph from Allen Robe

A VIEW OF SAN LEO FROM SAN MARINO

When Leo and Marino, Dalmatian stone-cutters, had completed their self-appointed task of caring for the spiritual and physical well-being of the Christian slaves who were reconstructing the walls of the city of Rimini, they sought peace and solitude on two neighboring heights now called San Leo and San Marino.

public, whose greatest length is 9 miles, is completely surrounded by Italy, who respects its autonomy, as have rulers of the past, with a few fleeting exceptions, since the pious Dalmatian stone-cutter left the mountain to his followers, "free from every other man."

Today is the time when the rights of little nations are commanding a good deal of the world's attention. Their claims before humanity have been forced by tyranny and the horrors of war. San Marino, littlest nation of them all, is of interest because of its very freedom, its persistent maintenance of its hereditary liberty.

The tradition of its safety, its internal peace, in contrast to San Leo, is ingenuously expressed in the ancient belief that whenever an evil and avaricious spirit, covetous of dominion, entered a citizen, that citizen, through some occult power, was disposed of. Disturbers of the public peace did not last long. Saint Marino, you see, watched over his Republic. Whatever be the reason for the perpetual peace, the veneration of the saint is boundless. Today, with the same sincerity and reverence as of old, the silver bust containing the head of Marino is carried throughout the Republic to bless it.

A REPUBLIC WHOSE IDEAL HAS BEEN MAINTAINED

That this little Republic, which today has 11,000 inhabitants and an area of 38 square miles, has maintained its independence, its ideal of liberty, in the midst of strife and bloodshed, of changing social conditions, for sixteen centuries, adds dignity to the unwavering belief of the trusting ones in the never-ceasing protection of the saintly founder.

The position of the mountain, far from the great Roman roads, the Via Flaminia and Via Æmilia; sufficiently distant from

the coast to be safe from maritime invasion; the stronghold impregnable to assault by medieval armies; the retiring and unostentatious, peace-seeking character of the inhabitants; the comparative poverty of the country—all contributed to San Marino's being left alone. But external reasons were not sufficient—there was an internal cause which existed in its institutions and its morality.

In the most disrupting centuries of Italian history San Marino had no factions, no strife between feudal lords and people, no domineering insolence of conquerors, no lost rights to vindicate. Instead, the people lived simply, changing their constitutions slowly, according to the needs of the times, always adopting changes which were best for the development and conservation of liberty.

In the life of the Republic today the influence of the Dalmatian saint is strongly reflected. For a country to maintain the characteristics of its primitive founder is a social phenomenon of which possibly San Marino alone can boast.

THE ARRIVAL OF MARINO AND LEO

During the days of Christian persecutions, in the middle of the fourth century, Marino and Leo, two stone-cutters of Arbe, Dalmatia, crossed the Adriatic and came to Rimini. Their reason, says tradition, was to aid Christians, condemned by pagan rulers, to reconstruct the walls of that city. Realizing that the labors of those who were compelled to hew the rocks from the mountains and transport them along the Marrechia to the mouth of the river were the most oppressive, they ascended the river and stopped before those two abruptly rising mountains, commanding sentinels of the landscape.

Their experience as stone-cutters soon placed them in charge of large numbers of slaves, to whom they brought not only material but spiritual help. Legends of those far-away days tell how both procured donkeys to aid them, and one day a bear devoured that of Marino. The saintly man immediately bridled and saddled the bear, and the wild beast submissively performed the labor of the donkey it had eaten!

The walls of Rimini having been finished, Leo and Marino looked longingly upon the solitude of the two mountains. As the hermits of the Thebaid, who flourished at this same period, they sought peace and solitude in those impenetrable heights. Hewing a bed from the rock and cultivating a little garden, Marino found all his material wants supplied. This rough bed and site of the garden are pointed out today by reverent peasants.

A few slaves followed their former overseers in order to practice, undisturbed, their Christian faith. Leo and Marino, overthrowing all pagan idols, each built a little church. Fine remains of the Roman temple of Jove, once dominating the height of San Leo, are seen in the columns of the cathedral and La Pieve today, while small bits of sculpture also have been found at San Marino, where the cathedral now rises on the ancient site of the fourth century chapel of the saintly founder.

WEALTHY MATRON GIVES MOUNT TO THE HERMIT

From neighboring fields and pastures and little settlements, came the weary and oppressed, seeking peace and the Christian faith upon the two mounts. Poor and simple people, their wants were easily satisfied. Soon two small villages or colonies sprang up about the little churches, taking the names of the two apostles. Legend adds that in those early days, when hewing and quarrying was the industry, even as it is today, the two saintly stone-cutters exchanged their implements, tossing them back and forth from the two mountains!

The fame of the saintly hermit of Mt. Titanus spread abroad. Felicissima, a wealthy Roman matron of Rimini, impressed by the pious man, who had been bidden to come to that city, and grateful for receiving the light of Christianity and for the salvation of her sons, gave him the mountain, which she owned, as absolute and perpetual property.

The influence of San Leo has been wiped out by the centuries, while that of San Marino exists today, with a significantly simple appeal in these warring times.

Marino's desire was to found a free society, based upon liberty, justice, simplicity, charity, virtue, and, above all, a love of peace. When the good man came to die he called his followers about him and bequeathed to them his mountain, "free from every other man" (*ab utroque homine*). His parting prayer was that they never seek enlargement of territory by violent means. War, though a painful necessity for those acting in self-defense, was an unpardonable crime in those who caused it. Begging his followers to remain true to the faith and to live in perfect accord, freemen all, he passed away, little dreaming that in the twentieth century his little community would stand, a monument to his peaceful teachings and simple form of government, in the midst of a war-torn world struggling against autocracy for the peace and liberty of all nations.

THE MISSION OF THE FORTRESS BELL

As one stands looking out over the history-laden panorama at sunset, the sound of the fortress bell calls vividly to mind how little changed from ancient times is the government today and how true to tradition are these steadfast people. It is the bell announcing the Arengo, or Arringo, for the following day. For always at Ave Maria, the day before the election of officers, the inauguration, the fête of San Marino, and the semi-annual Arringo, or assembly of the heads of families, the great bell gives the tidings. Its ringing also calls the council meetings; its only sinister mission is to announce the passing of a penal sentence.

Twice a year, the first Sunday after the 1st of April and the 1st of October, heads of families have the right to assemble before the regents in the Council Hall and present petitions or suggestions for change or modifications in existing conditions. Prohibiting farmers from selling their produce before arriving at the Borgo, the introduction of religious teaching in the public schools, the question of a water supply—such were the most recent petitions of these twentieth century fathers of families.

The bell of the fortress calling the assembly of heads of families reflects the dawn of government. One sees in its past the shades of the patriarchate and the dim outline of the referendum.

In the beginning, the followers of San Marino recognized as their head the rector of the monastery. Increasing numbers of inhabitants led to the formation of the Arringo, the gathering of fathers of families, presided over by the rector of the monastery. In the tenth century the government was liberated from the authority of the rector of the monastery, and the Arringo was replaced by the Council General, the assembly of heads of families continuing twice a year, as today, with the right only of petition.

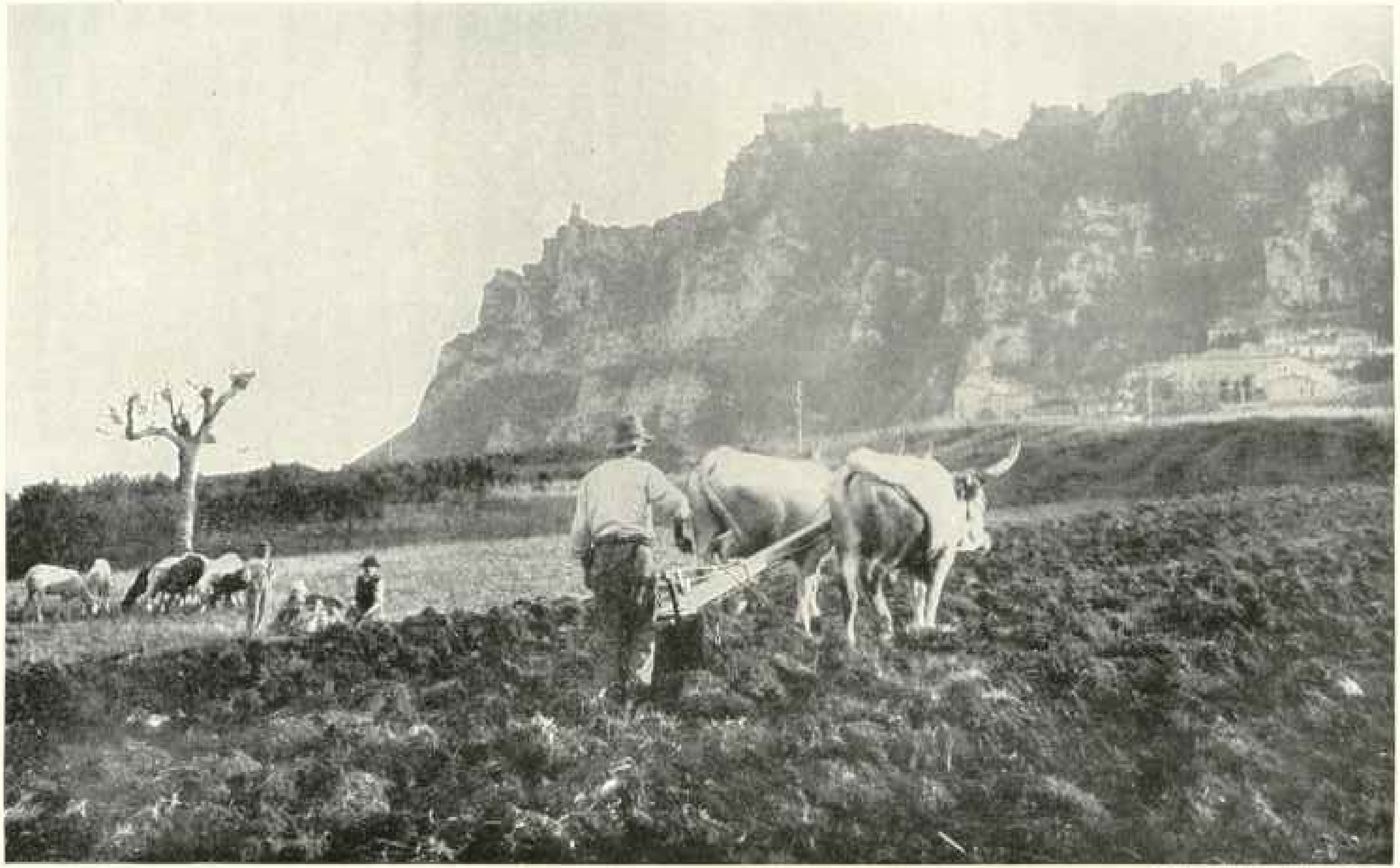
THEIR TERRITORY EXTENDED THROUGH PURCHASE, NOT CONQUEST

The retiring quietude of the mountain community was now stirred by the necessity of taking account of the outside world. Already the Court of Rome, basing its right upon the Pepin grant of temporal power, laid claim unsuccessfully to San Marino.

The eleventh century upheaval, which caused the Italian middle class, oppressed by feudalism, to form communes wherever walled cities existed, found San Marino also a commune, with its statutes and consuls. Through purchase, not conquest, these sober people extended their territory. They began, according to the needs of the times, to fortify their commune. The imposing Rocca fortress, a fourteenth century embattled stronghold, was begun in these troublous times. The strength of its walls, whose crumbling might encircles the citadel today, gave San Marino a formidable argument that it be left in peace.

The character of the little Republic and its twin mountain, San Leo, recall stories of sieges and the scaling of walls. And many were the attempts which marked its medieval history. The support given by the Sammarinesi to the Montefeltri against the Malatesta tyrants led to the agreement between Duke Frederic of Urbino and Pope Pius II, whereby the castles of Fiorentino, Montegiardino, and Serravalle, their courts and dominions, as well as Faetano, were granted to the Republic.

The liberty of San Marino, existing from the day the Dalmatian saint planted



Photograph from Alice Rohe

WITH THE THREE GREAT TOWERS OF THIS LITTLE REPUBLIC EVER IN VIEW, THE SAMMARINESE PLOWMAN WENDS HIS WAY

Photograph from Allen Rohe

THE IMPREGNABLE MEDIÆVAL CASTLE CROWNING SAN LEO, TWIN MOUNTAIN OF SAN MARINO

In this stronghold, the arch-impostor Cagliostro, who, after selling love-philters, elixirs of youth, mixtures for making ugly women beautiful, committing many acts of knavery, and serving prison terms both in the Bastile and in London's Fleet prison, was imprisoned in 1789 and died six years later. There is only one gate and one roadway to this stronghold.

Photograph from Alice Robe

THE INAUGURAL PROCESSION IN SAN MARINO

The two regents, heads of the State, are seen leaving the palace preceded by an attendant who bears the keys and seals of the Republic. An inauguration takes place every six months. Regents may not serve two successive terms.

the cross, carved with "Libertas," upon Mount Titanus, seemed doomed forever in the sixteenth century, when Cæsar Borgia, having destroyed the lordships of Umbria, the Marches, and Romagna, raised his avaricious eyes against the land of liberty. At the death of his father, Pope Alexander VI, Borgia was forced to abandon his designs upon Italy and the Republic's lost liberty was soon regained.

The infamous Cardinal Alberoni occupancy, from October 17, 1739, to February 5, 1740, when the town was sacked, following the refusal of the Sammarinesi to renounce allegiance to their Republic, was the longest usurpation of their liberty. The event, which still stirs resentment in the hearts of these people, was immortalized by Carducci in his address at the dedication of the new government palace in 1894.

Napoleon respected San Marino's independence in 1797, offering large tracts of territory, which the Sammarinesi cour-

Photograph from Alice Rohe

THE ONION CURB MARKET: SAN MARINO

The commercial life of the Republic centers in the Borgo, and every market day housewives and servants come down from the heights to buy their vegetables. Important fairs are also held here in September and October, when traders come not merely from all parts of the 38 square miles of San Marino, but from neighboring towns of Italy as well.

teously refused. Writing to his minister regarding the map of Italy, he said:

"We consider San Marino as a model Republic."

THE GOVERNING BODY

Today the government of San Marino, impregnated with the spirit of its fourth century founder, preserves picturesque forms and customs.

A council of sixty citizens—the Grand Council—is the governing body, which has the supreme power accorded it by the primitive popular Arringo, composed of heads of families. Until recent times these sixty were chosen, one-third from the patricians, one-third from the landowners, and one-third from the peasants. There is no official recognition of nobility in these days, patricians and nobles, al-

Photograph from Alice Rohe

FAIR DAY IN THE PIAZZA BELZOPPI: SAN MARINO

Fair days in the little Republic present a kaleidoscope of color. Gayly kerchiefed peasant women, farmers, land-owners, stock-breeders, boys and girls mingle in a democratic throng.

ways created for special service to the country, being citizens like all the rest of the inhabitants. Originally, councillors were elected for life; now they are re-elected every three years. As few changes are made, the life term practically exists. The only times the Sammarinesi exercise their power of voting is at these triennial elections and when five councillors, through death, are lacking in the sixty.

From its number, every six months, the Council chooses two consuls, or captains regent, who are invested with the executive power and who preside at meetings of the public councils. These, before San Marino abolished class distinctions, were chosen, one from the patricians, one from the peasants. The office is honorary, each regent being allowed 150 lire (about $30) for clothes. The elaborate medieval costumes for state events and the frock coat and silk hat for ordinary public occasions would scarcely be covered by that amount.

The regents, with their six months' tenure of office, can be reëlected only after an interval of three years, the dominating idea to maintain a free government of the people without peril of a one or two man power being seen here, as in every law and custom of the Republic. Back in the thirteenth century the titles of these two consuls were changed to captain and defender, signifying their special medieval mission of leading and protecting the people. In the fourteenth century the present titles of captains regent were adopted.

NO WOMAN'S SUFFRAGE IN SAN MARINO

From the Council of sixty there is also chosen each year what is known as the Council of Twelve, which acts as a mediary body between the Grand Council and the regents. It has the power of judging criminals in preliminary hearings and civil cases of the third grade and also assists in contracts for minors and

women. Needless to say, there is no woman's suffrage movement in San Marino.

From the same sixty councillors another nine are chosen for the Economic Committee. There is also a Secretary of Foreign Affairs and a Secretary of Home Affairs.

Justice is administered by three foreign judges, changeable every three years. San Marino's love of justice is reflected in this judiciary system, for the employment of foreign judges, a custom from early times, precludes prejudices and favoritism, which might arise in a community where nearly every one is related either by blood or interests. As for the jury system, San Marino regards its dangers as too obvious.

Geographically speaking, there is nothing on the level about San Marino. Life is one continuation of ups and downs. The daily excitement of meeting the auto which plies—in summer twice a day, in winter once—between Rimini and the Republic would be breathless if the inhabitants were not accustomed to climbing. Life is as peaceful as Saint Marino could have wished. It is possible to walk up and down the steep, winding streets, flanked by their quaint old stone houses, without meeting a stray pedestrian. That, of course, is during ordinary hours, for all San Marino turns out for the arrival of the auto. Housewives who have given commissions to buy supplies in Rimini are always in evidence. Then, too, the post arrives and the whole population seems to congregate in the Piazza della Liberta for its distribution.

CITIZENS FOLLOW THE OCCUPATION OF SAN MARINO

The quiet of San Marino is proverbial. From the slopes beneath the ancient fortress the sound of the stone-cutters at work in the quarries recalls the story of the Republic's founder even into the heart of the capital. The Sammarinesi of today follow assiduously their founder's occupation, which is their principal industry. Stone is carted to Rimini, Forli, and all the neighboring towns and countrysides.

In this tranquillity there is small need of a police force, and even the militia of the fortress, now used as a prison, was recently disbanded. The public force, with the exception of several carabinieri, whose duty seems to be to make picturesque details in the narrow streets, consists of the gendarmes and the Noble Guard, now called Guard of the Council. It is their duty to act as escort of honor for the captains regents on days of civil and religious solemnity, and especially to guard regents and councillors when in public session. The brigadier of gendarmes, or carabinieri, during these war days examines passports and decides whether strangers may remain in the Republic.

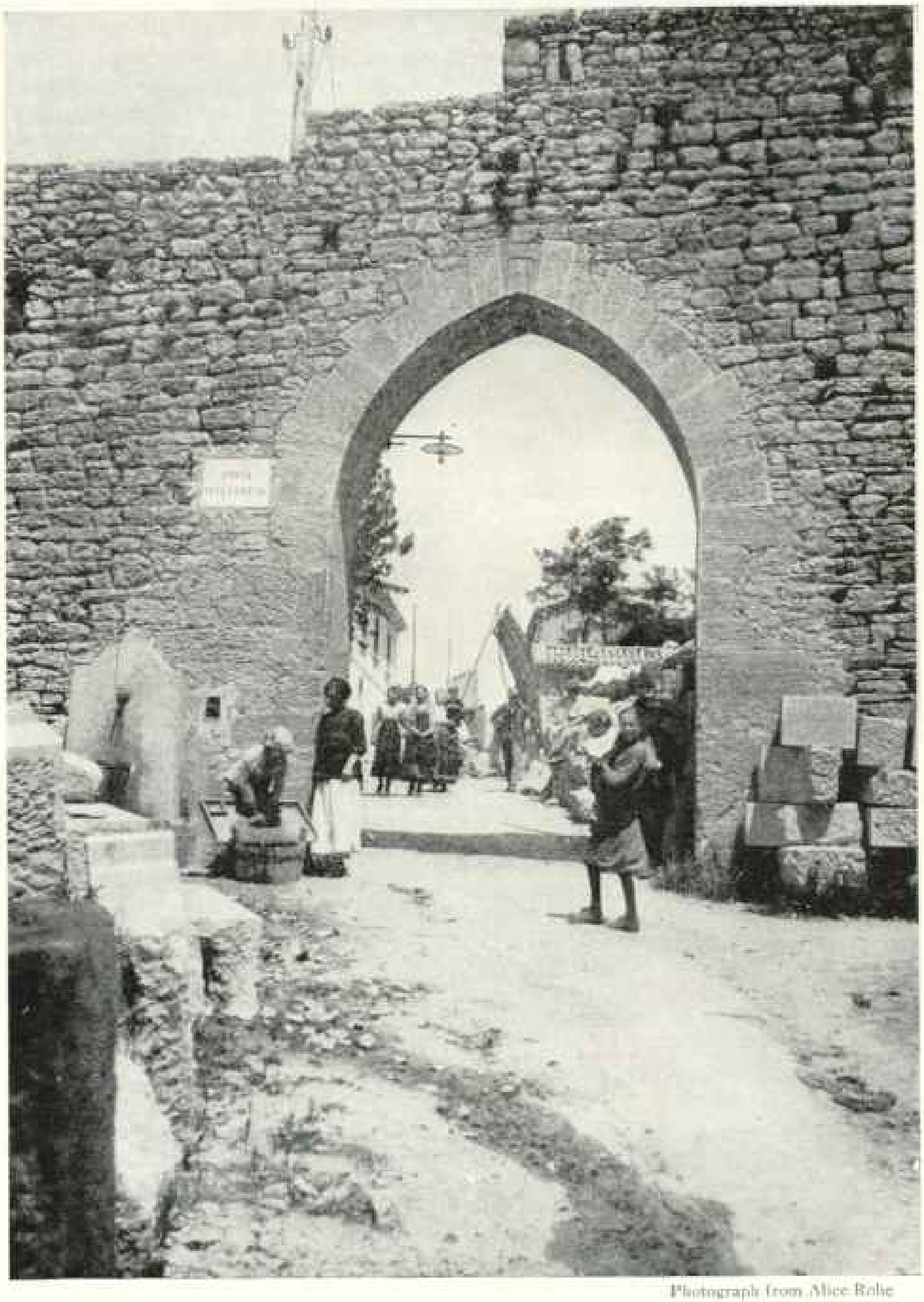
As for the national defense, every citizen between 18 and 60 years of age is enrolled for military service in case of the country's need. There is no conscription, the Sammarinesi of all centuries recognizing their obligations of defense as a matter of course.

SAN MARINO'S GREAT FEAST DAYS

On its great days, October 1, April 1, and September 3, how San Marino changes from its accustomed calm! To the outside visitor, who escapes from the direct impressions and thoughts of war into this little community, the festal days seem like a moving picture of the middle ages. The truly medieval ceremonies on the evenings of September 15 and March 15, and the winter *festa* of February 5, the fête of St. Agatha—the last named dear to every Sammarinese heart as the anniversary of the final liberation from the Alberoni occupancy—are of only slightly less importance.

On the 15th of September and the 15th of March, at the hour of Ave Maria, the bells of the government palace and the fortress announce the hour of electing the new regents. San Marino flocks to the Piazza della Liberta. Within, the Council is in session, the regents having been escorted from their homes in picturesque cortège to the palace.

The ceremony of choosing the new regents is an ancient one. First of all, by extracting names, 12 nominators are chosen. Each of these must name a candidate, one in whom he has full faith and also one who has not for three years held that office. The 12 names are then voted upon by the white and black ball



Photograph from Alice Rohe

A GATEWAY IN THE ANCIENT WALLS OF SAN MARINO: THE ROAD LEADS TO THE QUARRIES IN WHICH THE REPUBLIC'S FOUNDER LABORED

Few places on earth have retained their medieval atmosphere as effectually as San Marino, and yet even here the sign of progress is in evidence. Note the electric light conspicuous in the arch of the Porta Della Fratta, beneath whose shadow the women of the little Republic come to do their weekly washing.

system, the six receiving the highest number of votes being the candidates. These six names are then coupled in three pairs, the arrangement being amicably made by the candidates.

A CHILD CHOOSES THE REGENTS

The cortège then issues from the palace—the regents, in their medieval state costumes, accompanied by attendants in livery bearing torches. Up the steep street to the near-by cathedral, the cortège goes. At the door of the church the regents are met by the archpriest, who awaits them with holy water and blesses them.

The religious element of primitive times in San Marino's government is evidenced in all the modern ceremonies. The regents take their posts of honor on the canopied throne beside the high altar. Guards, carabinieri, the entire cortège, stand at attention in the long nave. The archpriest offers a prayer to San Marino; then he reads the six names and puts the three couplets in three little silver balls. They are placed in a silver urn, shaken about, and a child is called to draw out one of them. The little one holds it up before the breathless congregation. It is then given to the regents, who open it and read the names. They in turn go to the high altar and give the paper to the priest, who reads aloud the names of the new heads of the government. Instantly, the band sounds the national hymn and the cortège with flaming torches winds its way back to the palace. The newly elected regents are officially notified with medieval ceremony.

THE INAUGURATION CEREMONY

The inauguration is the big event of the Republic, when the tradespeople, a number of whom are souvenir-sellers, look forward to their chief profits from visitors. The simplicity of life here is such that 20 or 25 strangers are regarded as a great invasion, and the whole community is agog.

The important occasion is announced the night before by the ringing of the fortress bell. On the morning of the inauguration a series of parades begins. The noble guards, resplendent in beplumed hats and gold-braided uniforms, preceded by the band, first march to the homes of the regents to escort them to the palace in Via Giosue Carducci, where they clothe themselves in the state garments.

At ten the gorgeous procession moves through the narrow streets to the government palace. The regents having entered, the populace, with all the cortège, stands at attention for the moment when the flag is unfurled from an upper balcony. As the banner, blue and white, with the coat of arms of the Republic—the three plumed towers, encircled in a laurel and oak wreath tied with a ribbon bearing the motto "Libertas"—is raised, the band strikes up the national hymn, a quaint, unmartial air, founded on an ancient theme of Guido Monaco.

The spectacular moment which the populace awaits is when the regents leave the palace to attend mass in the church where lie the relics of the Republic's saintly founder. Following mass, at which the regents assist in their official posts beside the altar, the retiring regents on the canopied throne, the new ones in a simple pew, the cortège goes back to the palace, where the inauguration ceremony takes place.

An address by a former regent is always delivered. Then the new regents take the oath of office and the old ones, removing their insignia of power, place them upon the future heads of government, bestowing upon them the seals and the keys of State. The ex-regents step down from their seats of authority and the new ones take their place. Then the ceremony is over and the cortège accompanies the regents to their homes.

The whole day, however, is one of gaiety. The band serenades the regents, who in turn receive the townspeople. From all the hamlets of the Republic people crowd to the capital. It is a constantly changing picture of life which seems far removed from the world of today.

THE FÊTE OF SAINT MARINO

The spirit of primitive times, developed into picturesque customs during the middle ages, casts its spell over the Republic on its day of veneration and rejoicing, September 3, the fête of Saint Marino.

Photograph from Alice Rohe

SAN MARINO'S WAR HOSPITAL AT THE ITALIAN FRONT

The mound in the central foreground is a flower-bed, with the seal of the Republic appearing in blossoms

The day opens with the joyous ringing of bells, and at half-past nine the band plays in the Pianello. The usual ceremony—the unfurling of the flag, the cortège of regents proceeding to the cathedral—takes place with a fervor as though ever new.

After solemn high mass the procession, augmented by many priests, with the sacred relic, the head of the saint enclosed in a silver bust, proceeds through the town, blessing the various institutions. At noon comes the vital moment when the archpriest blesses the government palace with the venerated relic. The mid-day hour is tense with religious feeling. Standing beneath the loggia, the priest raises high the revered reliquary. At the instant of elevating the silver-encased head, as though automatically released, the bells peal forth and kneeling San Marino rises to its feet.

The ceremony of February 5 has especial significance, when from the church of Saint Agatha, in the Borgo, the Sammarinesi climb in procession to the cathedral, or La Pieve, as the church of the saint is called; for it celebrates in the memories of the people the end of the Cardinal Alberoni usurpation. Legend tells how long ago, one cold winter day, the whole Republic being covered with snow, the people shivered in their homes and decided not to fare forth. The next morning, to their surprise, they found the snow marked from Saint Agatha to La Pieve with the tracks of wild beasts who, in rebuke to the people, had held the procession. Needless to say, the function has taken place, regardless of weather, ever since.

Though intensely devout, the religious atmosphere of San Marino is noticeably different from that of Italy. There is less of form, despite its reverent mediæval customs. The Sammarinesi seem to have kept alive the primitive spirit of the early Christians in spite of the fact that at the end of the tenth century they were drawn into the hierarchy of the Roman

Photograph from Alice Rohe

STONE QUARRIES BENEATH THE ANCIENT WALLS OF SAN MARINO

The twentieth century Sammarinesi follow assiduously the occupation of their fourth century patron saint. Stone is carted to Rimini, Forli, and neighboring Italian towns.

Church. Their religion is interwoven with their law. Here the religious marriage ceremony is legal and the only one performed, while in Italy the civil ceremony is obligatory.

Monasteries and convents there are, where the simple communist idea of primitive times seems also to prevail. At Serravalle, an ancient custom exists which preserves the early habits of the religious orders. The little hospice is still open where in olden times wayfarers could find a haven and where foundlings were left. The grain from the little farm owned by the hospice was made into flour and distributed among the poor on Christmas eve. The unchanging customs perhaps reflect the reason for the peaceful life of the Republic.

THE RECREATIONS OF THE PEOPLE

The quiet recreations of the Sammarinesi are picturesque to the outsider. During the summer months on Saturday nights, band concerts are held in the Piazza della Liberta. On these evenings, when a full moon hangs over the dark outlines of distant mountains, the picture is reminiscent of those medieval squares as reproduced in our grand operas. Couples walk back and forth about the statue of Liberty, or they seat themselves on the walls separating the steep street from the piazza, or lean against the parapet which overhangs the depths below. Others gather about little tables before the age-gray café, all living pictures of days that seem long past.

In winter, life is a different story. The little mountain Republic is so cold and such deep snow fills the narrow streets that the people practically hibernate. The climate, which in summer is especially delightful, changes from warm to cold early in October and remains cold until April.

The dwellers in the capital, bearing

family names interwoven in the history of the Republic, are for the most part government employees, professors in the college, storekeepers, or doctors. There is a good hospital and a college which admits to many of Italy's universities.

COMMERCIAL LIFE CENTERS IN THE BORGO

The commercial life of the Republic is centered in the Borgo. Every week, market days draw from the capital above housewives and servants. The fairs, the chief ones being in September and October, are occasions when buyers and sellers come not only from all over the Republic, but from neighboring Italian towns as well.

Fair days present a kaleidoscopic picture of gay-kerchiefed peasant women, farmers, stock-growers, boys and girls leading sheep, pigs, and cattle. The cattle market from a distance looks like an encampment of innumerable tents, with the indistinguishable forms of hundreds of great white cattle, which are the beasts of burden in this country.

War has demanded its toll even among Sammarinesi cattle, but so prosperous is the stock-raising industry, one of the most important of the Republic, that the fairs are still imposing and picturesque events. One sees young and old climbing the ascending roads, bringing their cattle, little calves, half grown, good workers, good breeders, cows that provide milk and daily toil as well—all for sale.

In the piazzas, peasant women, with great garlands of onions and garlic, baskets of eggs, picturesque flat baskets full of live chickens, hampers of the famous San Marino sheep's-milk cheese, bargain and barter. Booths with everything from dress goods to hair oil are surrounded by eagerly buying peasants and townsfolk; for San Marino has no well-stocked stores, and therefore the fairs, with their visiting merchants, are of unusual importance.

The towering capital bears no fruit, except the heritage from its founder—stone of the quarries—but the villages and countrysides surrounding Mount Titanus yield their share of various products. Aside from cattle, poultry, eggs, cheese, and vegetables, the vine plays a notable part in the life of the Republic, and the wine of San Marino is of a superior quality.

All the picturesque features of the vintage of poetry are found in San Marino late in September. All ox-carts seem to lead from vineyard to wine-cellar, and feet are stained red with the juice of the grape. In the vineyards bare-footed men pack the grapes in huge barrels atop the ox-carts, which transport the fruit to the cellars. Here peasants, juice spurting through their toes, crush the grapes in great vats from which the escaping liquid runs off, ready to be stored in barrels for fermenting. Here the young figure of a modern Bacchus, there old men like satyrs, stamp the future wine in these dark canteens. Even the smallest farmers, the poorest peasants, who boast no cellars, tread their grapes in the farm yards or wagon-sheds.

FROM CRADLE TO GRAVE

Picturesque customs abound in San Marino. From birth to death the Sammarinesi pass the circle of existence as did their forebears. One of the characteristic sights is that of a christening party—the midwife, with the baby in her arms, covered by a huge stiff mantle, looking like an animated piece of furniture moving through the cobbled streets toward the cathedral, followed by the godparents of the newcomer.

When Sammarinesi are carried to their last resting place—the architecturally attractive cemetery at the end of a cypress avenue down the slope of the mountain—the coffin, covered with its heavy pall, is supported on the shoulders of friends until the city gates are reached; for no funeral car could wind its way through those steep, narrow streets. At the gates the cortège is met by the hearse, which proceeds down the mountain to a cemetery that is a modern copy of the ancient catacombs.

Beneath the chapel and the cloistered loggia of fourteenth century style, graves are hewn from the living rock, as in those early Christian burying grounds. One passes through avenues flanked by last resting places, here tiny ones for children, or still smaller ones for bones; there larger ones for adults.

The Sammarinesi seem little occupied with business, the few stores of the capital doing a leisurely trade. But in its quiet way San Marino has touched on most of the economic and social problems to its own satisfaction. It has its compulsory education law, and everything is being done to eradicate illiteracy, which still prevails among the peasants. A good school system, a college, and an excellent little museum attract students from neighboring towns.

THE REPUBLIC'S COÖPERATIVE INSTITUTIONS

The Mutual Aid Society, with an important savings bank, whose object is to aid the working classes, has many branches reaching into the public life. Coöperative societies have been fostered by the Mutual Aid, among the interesting ones being the Coöperative Canteen. Its object is to serve good wine at a low price. Drunkenness is little known in San Marino, where crime is a rare occurrence. The Sammarinesi know what is good wine and they insist upon having it. One can always tell a wine shop, even when there is no painted sign, by the branch of a tree or bit of bush hung over the door.

The public bake-house is one of the busiest of coöperative institutions. Before October, 1917, families nearly always sent their bread to the public oven to be baked. In October last, the economic effects of war made it necessary for the Republic to prohibit private bread baking. Bread tickets are issued and the bread, made in the public oven, is sold during certain hours of the day in the market loggia.

The grain magazine, where members of the Mutual Aid could buy grain and flour at low prices and on credit, has naturally been affected by the war.

The branches of the Coöperative Labor Organization indicate the occupations of San Marino. It includes stone-cutters, masons, carpenters, and manual laborers. The Emigration Society's aim is to place Sammarinese laborers in other countries. The Consumers' League, of which the bake-house is a branch, boasts an economic kitchen.

There is a charity organization, a permanent home for chronic invalids among the poor, a fresh-air fund, which sends babies to the seaside in the summer, a hospice for winter, and of course a Red Cross Society.

Two theaters, one in the Borgo, one in the capital, are scenes of occasional histrionic fêtes, but dancing and theater-going have been discouraged since Italy's entrance into the war, this being the simple way of showing sympathy for the war-shadowed nation which surrounds the Republic. These quiet, unassuming people—earnest and sometimes austere—have adjusted life to their own wants. Indeed, the little Republic, which impresses one as very neat and tidy in its appearance, is quite as orderly in its social and economic life.

A REFUGE FOR THE PERSECUTED YESTERDAY AND TODAY

But while it seems self-sufficient and asks only for peace and tranquillity, San Marino has been a refuge for fugitives through all the ages, since the Dalmatian stone-cutter with his early Christians found shelter on this mountain top. Today, one finds refugees of various kinds and conditions living comfortably in the Hotel Titano or with Sammarinese families.

Penal offenders are not permitted to remain in the Republic, but political fugitives are given a haven. In times past many famous people have found shelter here, and today men known internationally live in the tranquil shadows of Mt. Titanus, awaiting their hour. Extradition agreements exist between the Republic and England, Italy, Belgium, and Holland.

Back in 1849, Garibaldi, with his handful of valiant men, found a life-saving refuge here when pursued by overpowering Austrian troops. The incident still lives in the hearts and history of San Marino, where tablets bearing Garibaldi's words on that occasion, a statue of Garibaldi, and a square named in his honor testify the love of the Sammarinesi for the great liberator. The coöperative canteen is situated on the ground floor of the

Photograph from Alice Rahe

EVEN THE HUMBLEST PEASANTS HAVE THEIR VINES AND MAKE THEIR CASKS OF WINE IN THE OPEN, TREADING THE GRAPES WITH THEIR BARE FEET: SAN MARINO

Photograph from Alice Rohe

THE THREE TOWERS, HISTORIC SYMBOLS OF THE REPUBLIC OF SAN MARINO

The houses of the Sammarinesi, flanking steep, narrow streets, seem to be clambering up the heights toward the three summits crowned with their medieval piles of masonry

house where Garibaldi and his wife, Anita, were given hospitality.

In the far-off sixteenth century, the Duke of Urbino found a haven here from the Borgia confiscator, the Sammarinesi helping him to escape to Venice, dressed in peasant's clothes.

SAN MARINO SENDS HER YOUTHS TO WAR

Although doves soar undisturbed above the Piazza della Liberta and San Marino nourishes its ancient desire to be left in peace, the Republic feels how impossible it is to remain unaffected by the world war. Naturally, the great effect on San Marino is economic, but the spirit of humanity, of liberty, has pulsed too strongly for centuries in this little community to permit it to be indifferent to the conflict surging about it. And so San Marino has shed its blood for the great cause. Fifteen of its youths volunteered in the Italian army. Two of them have already fallen upon the field of honor, three are Austrian prisoners, and four have been wounded. And San Marino, thrilling with the cause of liberty against autocracy, maintains a finely equipped hospital at the Italian front, enthusiastically replacing the one lost in last October's disaster.

Officially, San Marino is neutral. The report that the Republic had declared war against Austria—which was largely circulated—is without foundation, say the Sammarinesi.

"What a ridiculous figure we would cut—a little republic, without a standing army, declaring war against a great barbaric horde," said Professor Onofrio Fattori, councillor of 23 years' standing and former regent. "The truth of our relations is this: Several Sammarinesi are prisoners, and when we attempted to have them restored to us the Austrian government replied that we were no longer neutral, since our citizens were fighting for Italy, and therefore the request could not be granted."

The world recognizes San Marino as an ally on the side of democracy.

PRESIDENT WILSON BREAKS A SAN MARINO CUSTOM

War has brought an unprecedented breach of tradition in conservative San Marino. It is only natural that the littlest republic in the world should admire the biggest one; but as for the breaking of an ancient custom—President Wilson has accomplished that. Sammarinese babies, at least one in every family, are named after the patron saint. The others bear names of different saints or of distinguished men of the Republic. On April 25, a son was born to the daughter of the Sammarinese historian, the late Marino Fattori. The family was pulsing with President Wilson's historic address in which he announced the breaking of relations with Germany, and the parents decided no other name should be given the baby than that of the man they call the great apostle of peace and liberty.

So in La Pieve, with all the quaint Sammarinese customs, Baby Reffi was christened Wilson, and the records of the Republic were given a decided innovation. The fact that the letter "W" does not exist in the Sammarinese alphabet introduces a slight deviation from the American pronunciation, but "Vilson" conveys the idea quite satisfactorily.

Naturally, the language of San Marino is Italian, but the people use a dialect which, though based upon Italian, is not always recognizable.

San Marino's love of established calm has been disturbed by the same economic problems which agitate the entire world. On all supplies received from Italy this land of peace is paying its war tax.

Products which come from within the Republic have not reached the high prices of other countries. As cattle abound in great numbers, meat is cheap. Eggs, when selling for 7½ cents apiece in Rome, were obtainable at 4½ cents in San Marino. It is doubtful if in any other civilized country in the world a pair of fine young chickens could be bought at this time for four lire (about 80 cents).

TAXES ARE INSIGNIFICANT, RENTS LOW

Milk in bottles, carried in bag-shaped baskets of straw by girls and women from the farms below to the city, created an unheard-of scandal when it sold for 50 centimes (about ten cents) a quart. Though prices have increased enormously, on account of buying from outside markets, living is cheaper in San Marino than elsewhere.

Taxes are so insignificant and rents so

Photograph from Alice Robe

A CITY SET UPON A HIGH HILL: THE CAPITAL OF THE WORLD'S SMALLEST NATION AND EUROPE'S OLDEST STATE

The peasant women of San Marino follow their peaceful pursuits, while all about their miniature Republic sounds the clamor and the clangor of a world in the throes of war

low that the Republic does not have to face the serious problems of other countries. This is due to the fact that the government has no complex and expensive State organization to maintain.

A palace with a garden the size of a city block is taxed 11 francs a year, while a home consisting of six large rooms, cellar, and garret pays the astounding annual tax of one lira 70 centimes (about 34 cents).

As for income, tobacco and salt, which San Marino receives at cost from the Italian Government, with an annual compensation of 300,000 lire for the suppression of custom duties, are the only sources of revenue. San Marino sells its salt and tobacco much cheaper than does Italy, and its revenue from these two articles is 200,000 lire a year. There is also an agreement between Italy and San Marino that the latter shall not produce certain articles.

The relations between the Italian Government and the Republic are not those of a protectorate by any means, as San Marino, so proud of its autonomy, refrains from an accord which could give rise to that term. From its early life politically, however, San Marino has always had a stronger protecting friend—first the dukes of Urbino and later the Papal power. Today, the big friend is Italy, and the relations are described in the convention of 1894 as "Rapports of friendship and of good neighbors between Italy and the Republic." Further:

"The Republic, having the firm conviction that the protecting friendship of His Majesty the King of Italy for the conservation of its most ancient liberty and independence will never become less, declares that it will not accept that of any other Power."

All the other articles demonstrate the

Photograph from Alice Rohe

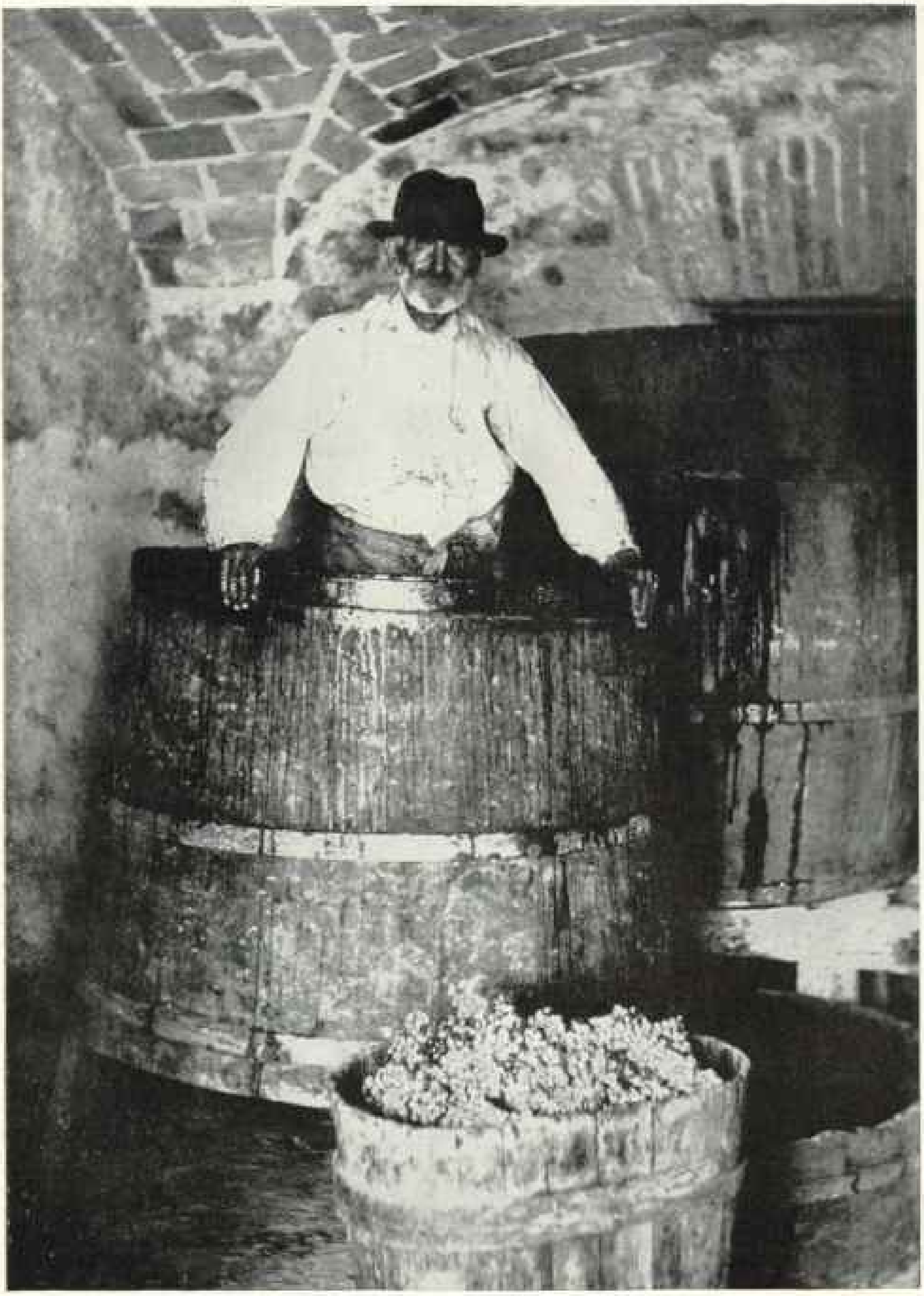
SPINNERS IN THE SUN: A CHARACTERISTIC SAN MARINO COTTAGE SCENE

While life in the mountain Republic is primitive, many domestic problems are simplified by coöperative institutions. For example, there is a community bake-house and an economic kitchen; also a coöperative canteen, where good wine is sold at a low price.

Photograph from Alice Rohe

SUNDAY MORNING GATHERING IN THE PUBLIC SQUARE: MONTEGIARDINO, SAN MARINO

The weekly social hour in the villages of San Marino comes on Sunday after mass. As in the towns and villages of America, the people, dressed in their best, linger a while after church services and discuss the affairs of the community with their neighbors. All have labored during the preceding six days and have had little opportunity for the exchange of opinions on the various topics that agitate every small community.



Photograph from Alice Rohe

HERE OLD MEN, LIKE SATYRS, WITH PURPLE JUICE SPURTING BETWEEN THEIR TOES, CRUSH THE GRAPES IN GREAT VATS

The escaping liquid is drawn off and stored in barrels in cellars hewn from the rock, where it is allowed to ferment. The wine of San Marino is of a superior quality.

parity and equality in which the two States are considered.

San Marino has coined its own money, though at present the Italian monetary system is adopted. It has its own postage stamps, the ever-present three towers being engraved in different colors in accordance with their value. The international telegraph and postal regulations are placed in the hands of the Italian Government.

Anomalous as it may seem, the little Republic has, on rare occasions in the past, bestowed titles of nobility upon foreigners who have greatly benefited the country. As for its nobility or patrician order, which seems to have crept in during the seventeenth century, when the title was given the regents, later councils eliminated such distinctions among a free people. The patrician families whose names are enrolled upon the Republic's "Book of Gold" are those who have performed exceptional services for the community.

THE REPUBLIC'S ORDER OF KNIGHTHOOD

There is a knightly order of five grades called the Equestrian Order of Civil and Military Merit. The first three grades are bestowed for service to the Republic; the last two for service to humanity.

All the forms and ancient customs are very dear to the people. The peasants evince a wonderful reverence for their country. These *contadini* live among their vines and fields, with their sheep and their great white cattle, keeping alive customs that are only picturesque memories in other lands. Here the women, sitting in the dooryard, carding the wool or spinning the flax, have ever before them the unchanging outline of the three-towered mountain. Men guiding the plow, behind the great white oxen, seem ever laboring toward the protecting heights of the guardian citadel.

On Sundays, the outpouring from the churches in the castelli, or villages, is a colorful picture of peasant life which could have been posed a hundred or many hundred years ago. And a sight which makes the Republic a decided contrast to Italy, only a few miles away, is the number of young men, living over again today the customs of their fathers. A change in their habits would be a disaster.

San Marino has had its opportunities to change from unassuming quiet and simple integrity. Some years ago an alluring offer was made to turn the Republic into another Monte Carlo. Though it would have meant wealth to the citizens as well as the government, the offer was rejected.

The littlest Republic in the world, true to the precepts of its fourth century Christian founder, the Dalmatian stonecutter, has perhaps found the secret of eternal peace and perpetual liberty in the modesty of its pretensions.

THE BRITISH TAKE BAKU

WHILE lacking the romantic interest and religious significance of their triumphant Holy Land campaign, which resulted in the elevation of the Christian cross once more over Jerusalem, no military operation of British forces in the Near East has been of greater importance than the recent occupation of Baku, the great oil city of the Russian Empire.

Four-fifths of all the oil produced in Russia comes from the 2,700 wells of the two vast oil fields of the Baku region. In 1915 (the latest available statistics, owing to the chaotic conditions which have obtained for two years throughout the Slav dominions) the Baku output was more than seven million tons of oil. The lighter grades formerly were transported by pipe line to Batum, on the Black Sea.

Baku is built in the form of an amphitheater on the south side of the Apsheron peninsula, which juts far out into the Caspian Sea. It is said to derive its name from the violent squalls (badkube) which frequently strike this section of the west Caspian coast.

Although there was a settlement at this

Photograph by Hon. John R. Jackson

A STREET SCENE IN BAKU

point as early as the sixth century. Baku, which is now a town of nearly 250,000 inhabitants, did not become a Russian possession until a little more than a hundred years ago. The upper part of the city, corresponding to the back rows of an amphitheater, is the picturesque Tatar quarter, with numerous narrow lanes and oriental bazaars. The most striking architectural feature of the place is the massive Kis Kale, or Maiden's Tower, a monument of the Byzantine period, which rises to a height of nearly 150 feet.

Centuries before the wealth of the Baku oil fields was realized, Persian fire-worshipers discovered natural gas issuing from the fissures of rock in this vicinity, and a few miles from the modern city there may still be seen the ruins of an ancient temple where these burning jets from the lower regions were the objects of adoration.

Aside from its importance as the Tampico of Europe, Baku had several thriving industrial establishments at the outbreak of the war, such as tobacco factories, flour mills, and sulphuric-acid works. Its trade with Persia and the Transcaucasus territory is active in peace times, the principal articles of commerce being raw silks, cotton, fruits, wines, and rice.

In addition to its advantages as a seaport, Baku has in recent years enjoyed railway connections both with Batum, 560 miles to the west by way of Tiflis, and with Rostov-on-the-Don, 818 miles to the northwest.

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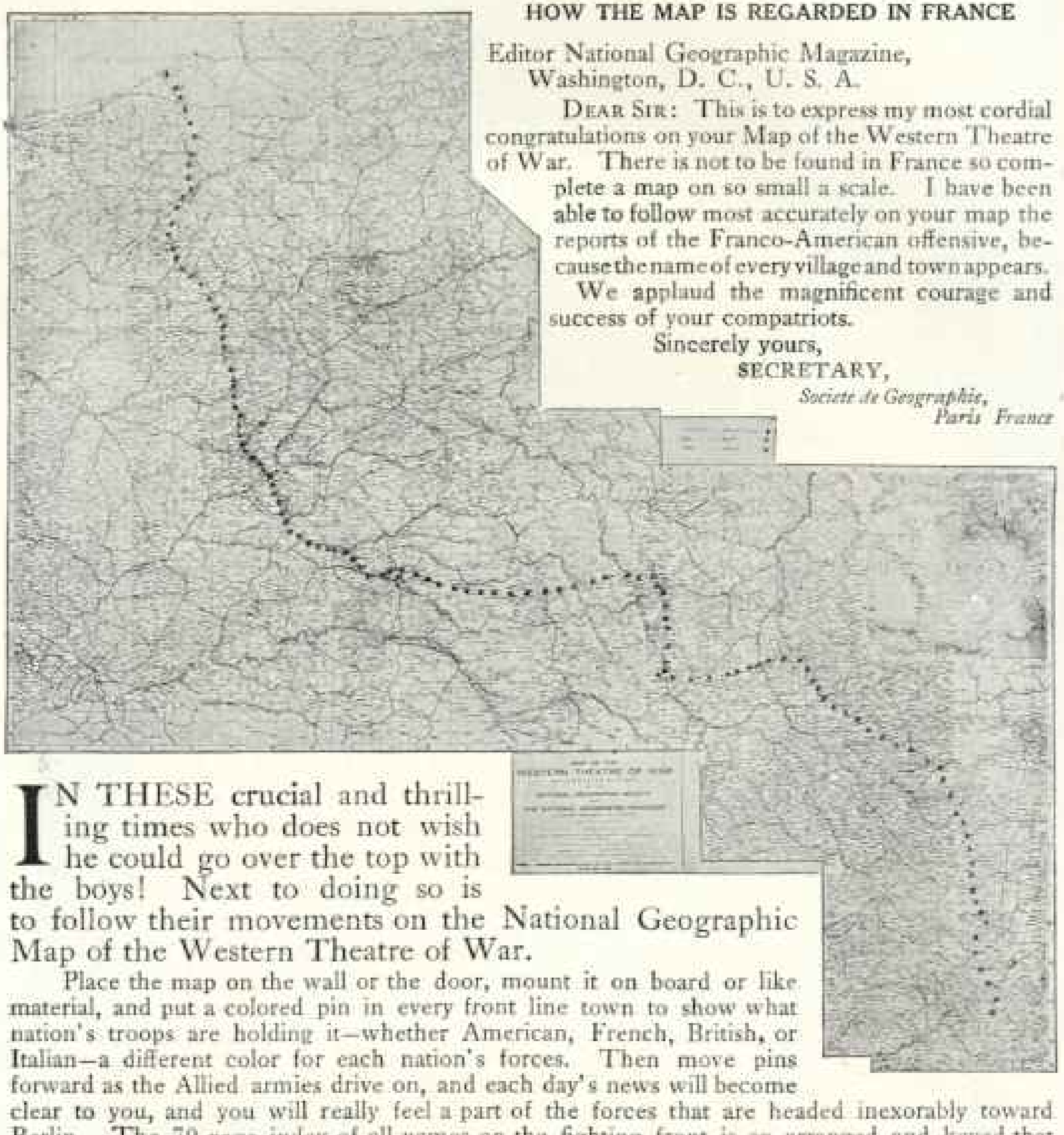

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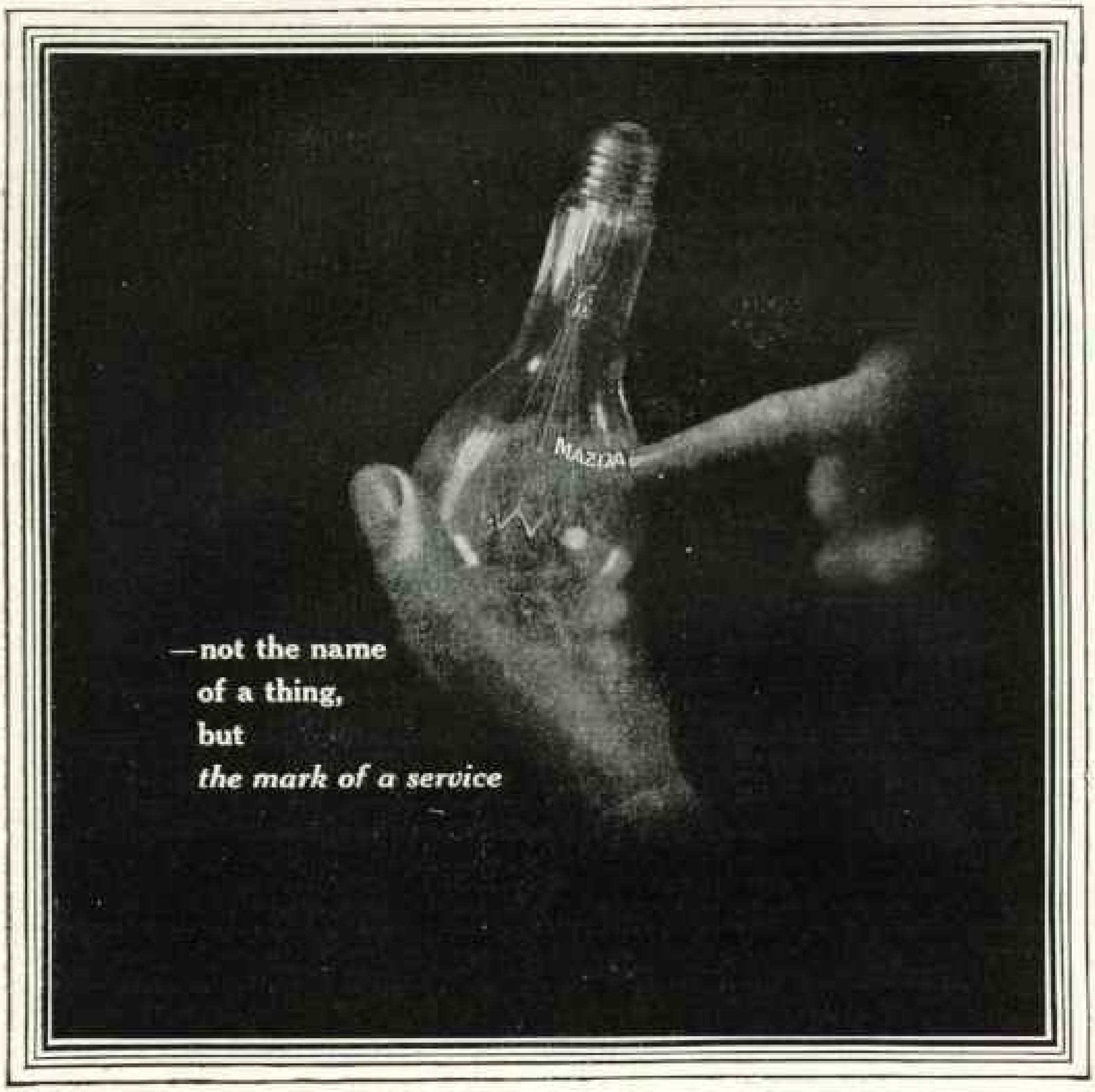

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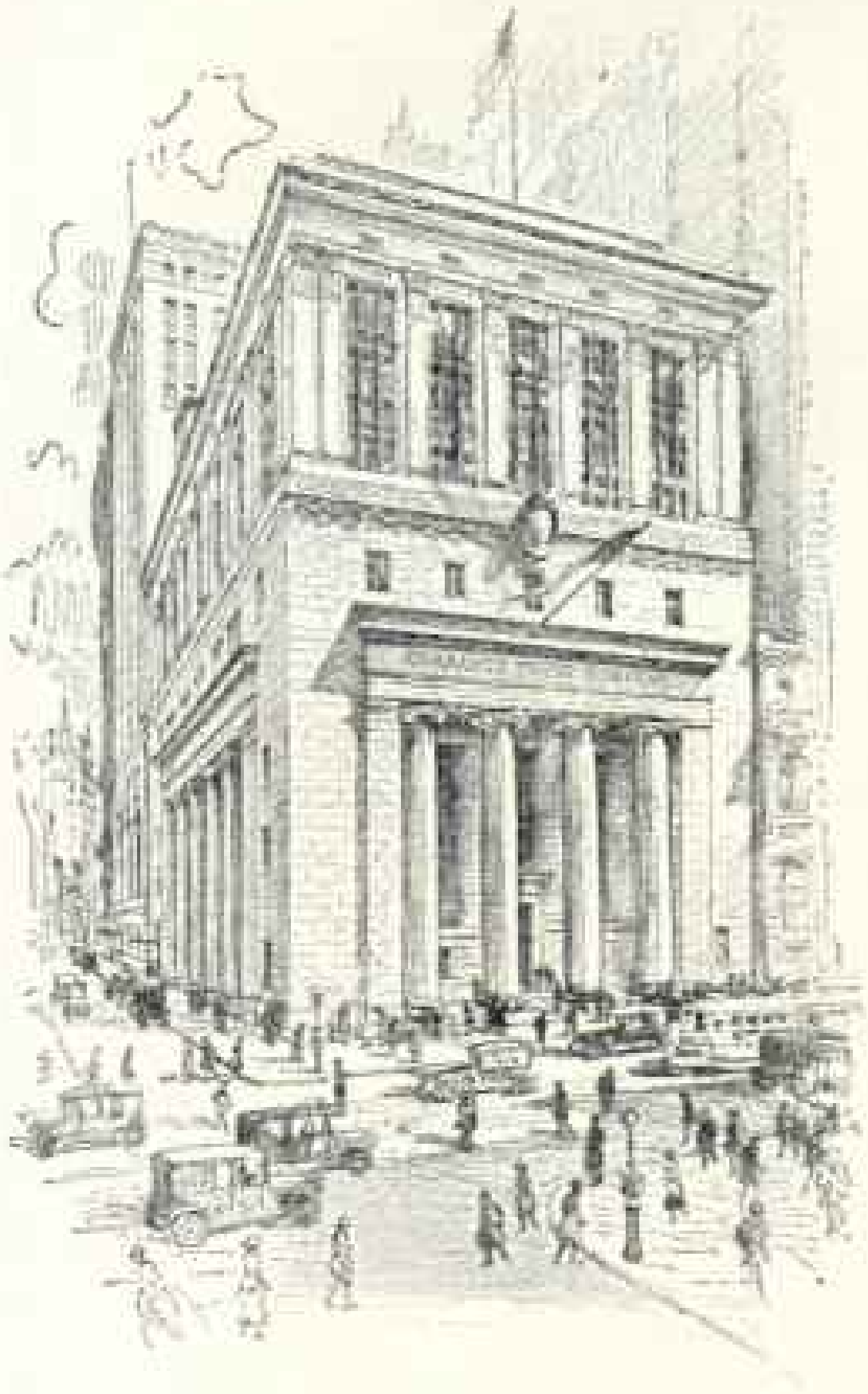

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DUES: Annual membership in U. S., $2.00; annual membership abroad, $3.00; Canada, $2.50; life membership, $50. Please make remittances payable to National Geographic Society, and if at a distance remit by N. Y. draft, postal or express order.

Please detach and fill in blank below and send to the Secretary

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_____ *191*

To the Secretary, National Geographic Society,
Sixteenth and M Streets Northwest,
Washington, D. C.:

I nominate _____

Address _____

_____

for membership in the Society.

_____

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8-13 (Write your address)

Your gums must be kept firm and healthy

If your gums are sore or tender—if they bleed when brushed—if they are soft or have begun to recede—then Pyorrhea is attacking the tissues surrounding the roots of your teeth.

As pyorrhea progresses, it destroys the bone sockets which hold the teeth in place. The teeth loosen and eventually fall out. And lost teeth are only one of the effects of neglected pyorrhea. Often the entire health is undermined by the pus-producing bacteria from unhealthy gums.

The medium widely recommended by the dental profession for maintaining the vitality of the gums is Pyorrhocide Powder. It is a part of the Dentinol and Pyorrhocide Method—introduced ten years ago by the staff of dental specialists and scientific investigators of the Pyorrhocide Clinic.

The Pyorrhocide Clinic, as the first and only institution devoted exclusively to the study of pyorrhea, has, since 1908, instructed visiting dentists from all parts of the world in the proved methods of treating and preventing pyorrhea.

The discoveries and results from the many years of continuous research by the Clinic staff and associated investigators have been given to the entire profession. Today thousands of leading dentists practice the Dentinol and Pyorrhocide method.

The medium employed is Dentinol, a liquid applied by the dentist. This is supplemented by the home use of Pyorrhocide Powder, which contains Dentinol combined with other healing ingredients.

Its Dentinol medication makes Pyorrhocide Powder unequalled for promoting a firm healthy condition of the gums. It helps to retard tartar formation, which is the principal cause of painful gums and loose teeth. It cleans and polishes the teeth.

Tooth, gum and mouth health can be maintained only by co-operation with a dentist and by the regular use, twice daily, of a medium like Pyorrhocide Powder compounded to meet the requirements proved essential by years of scientific research and clinical experience.

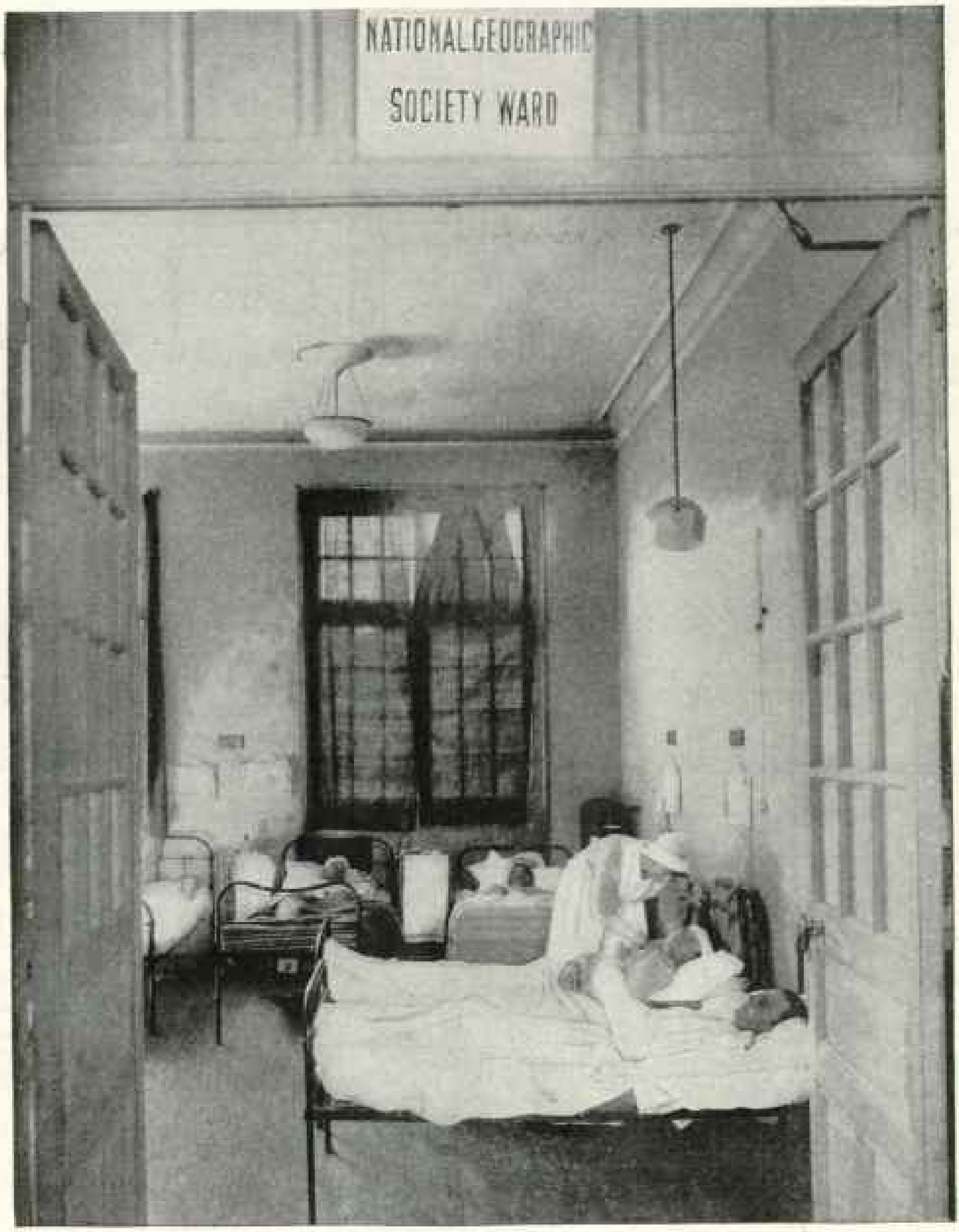
Pyorrhocide Powder is economical because a dollar package contains six months' supply. For sale by all dental supply houses and good drug stores.

THE DENTINOL & PYORRHOCIDE COMPANY, Inc.
1478 BROADWAY, NEW YORK CITY

Sold for years exclusively upon the recommendation of the dental profession. Effective not only in the treatment of pyorrhea but also in its prevention, when used regularly as a dentifrice.

Send for Free Sample and Booklet

Upon request we will send you a sample of Pyorrhocide Powder, together with our educational booklet on the cause and effects of pyorrhea and how it may be prevented.



Suppose He Were Your Boy!

There is No Overhead Expense in Handling the National Geographic Society Fund; Every Dollar is Expended for Equipment and Maintenance of the Wards

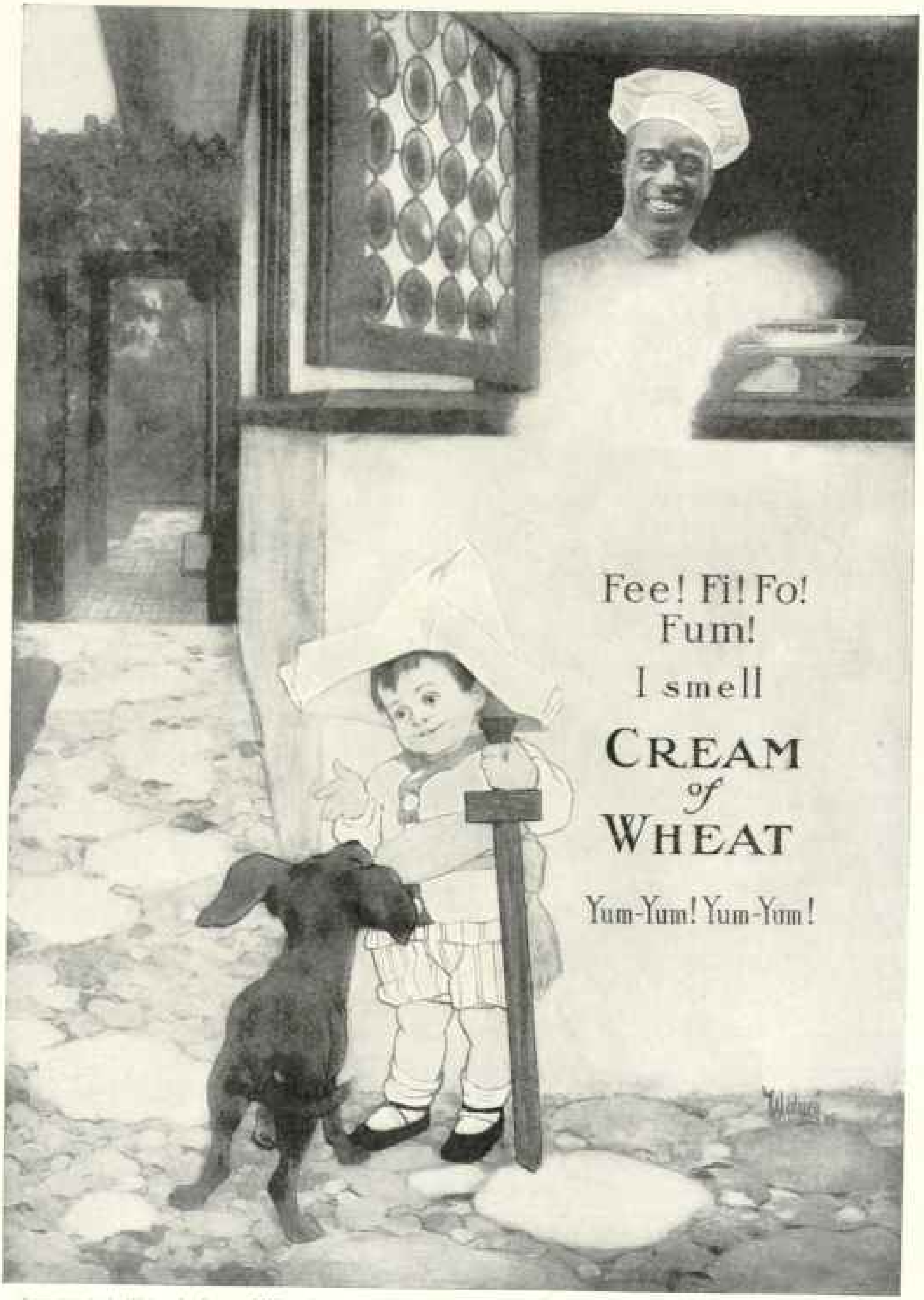
(CUT HERE)

GILBERT GROSVENOR,
Chairman, National Geographic Society Ward Fund,
16th and M Streets N. W., Washington, D. C.

I enclose $_____ toward the National Geographic Society Wards (twelve beds each) in the American Military Hospital No. 1, Neuilly, France. Two wards have already been established.

(Name) _____

(Address) _____



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