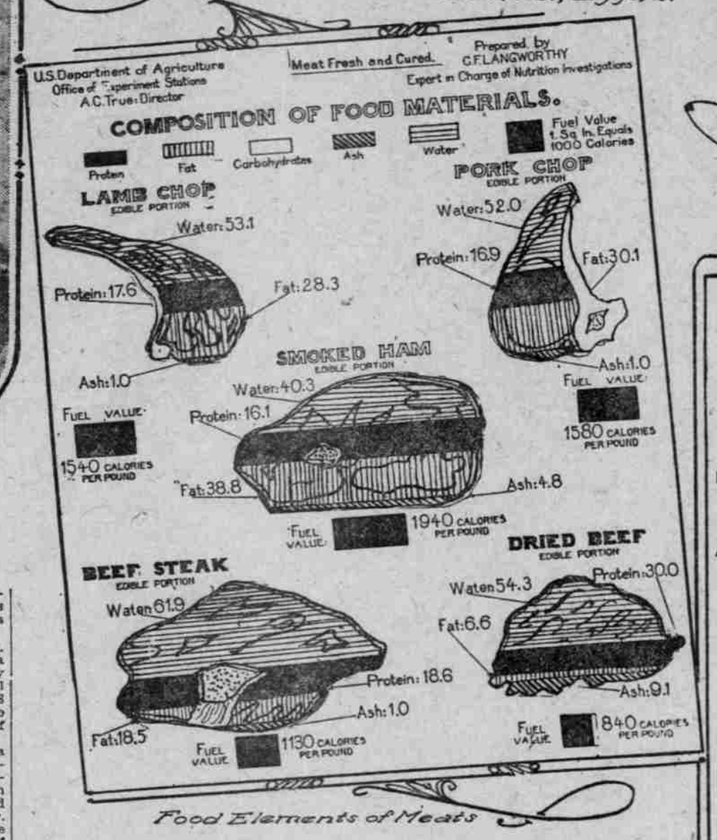
WORKING·OUT·THE·WAR·FOOD·PROBLEM

Starvation Has Three Stages. America Expects To Escape All But The First.

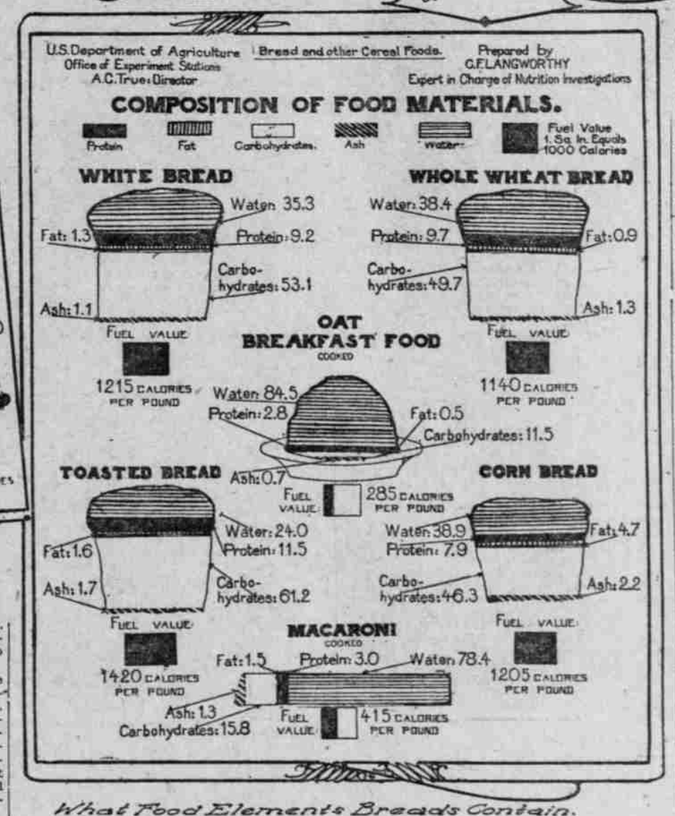
Adequate Food for Family of Five For One Day: Bread, 1½ lbs; Rolled Oats, ½ lb., Rice, ½ lb.; Flour, 1 lb.; Milk, 2 Quarts; Beef, 1 lb.; Eggs, 2.

Dr. Harvey W. Wiley Weighing a Ration of Bread.

Those Precious Potatoes—Ready for Market.



Food Elements of Meats



What Food Elements Breads Contain.

BY RENE BACHE.

HUNGRY? Not yet, of course, but you may feel that unpleasant sensation before the war is over. The recent announcement that the Winter wheat crop is 50,000,000 bushels short is in itself painfully suggestive.

One likes to feel hungry when a good meal is in prospect. It is a rather agreeable prompting to digestion, under such circumstances. But the case is awfully different when there is nothing satisfying in sight.

Starvation, in its progress, has three phases, recognizably distinct. The first of them we are bound to undergo, at least measurably. The second we shall probably escape. The third is, in our richly productive country, almost unimaginable, even for the poorest.

When people begin to look hunger in the face, the first thing they do is to inquire for cheaper substitutes—for things they can eat to take the place of foods they like, and to which they have been accustomed.

We have already reached this first stage. Lamb is so dear that most people have dropped it out of their bill of fare. Pork (formerly the poor man's meat) has risen to such a price that only the well-to-do can afford it. Poultry is rated an extravagance. Folks of ordinary means have fallen back upon inferior cuts of beef, with no confidence that even these will be available much longer at prices they can pay.

Vegetables and other food materials have gone up correspondingly. Of things to eat, a dollar will purchase today not more than two-thirds of what it could buy half a dozen years ago.

The situation in this regard is not going to be any better as the war proceeds; it will become progressively worse. What are we going to do about it?

The Government, some time ago, started in to help. Its first efforts were addressed to the bread problem. What materials other than wheat and cheaper—that was the question—could be used for making bread without diminishing its percentage of actual nutriment?

Bread is the "staff of life" in a sense much more literal than most of us imagine. It is the fundamental of the human diet. Let anybody try to get along without it for a few days and see what such deprivation means.

We must have bread. Furthermore, if we are not literally to starve, we must have plenty of it. The average family of five persons in the United States requires about 1000 pounds of bread per annum.

We are already suffering from a shortage of wheat. There is going to be a much greater shortage before long, as the available supply diminishes relatively to the demand. How, then, shall we get enough bread to eat?

The Department of Agriculture offers, as a partial solution of the problem, the idea of utilizing other materials for bread-making. Wheat is not the only breadstuff. Why not use other and cheaper cereals, mixing them with wheat flour for economy's sake?

It is interesting, in view of the present situation, to look back a century and a half, to a time when, in 1746, there was a great scarcity of cereals in New England. Wheat was selling at 20 shillings (about $5) a bushel, and a pound loaf of bread cost 12 cents. Allowing for the relative purchasing value of money in those days, this was approximately equivalent to three loaves for our present-time dollar.

There was in Boston at that time a baker named Nathaniel Thwing, who hit upon the idea of making a "famine bread," composed of cornmeal, rye flour and molasses, with sour milk and soda. Obtaining from the selectmen of the city permission to manufacture this bread, he sold it for 10 cents an eight-pound loaf, and later for 8 cents. Thus did "Boston brown bread" make its first appearance in the world.

But mark what has now happened. This "famine food" of a century and a half ago has become a latter-day luxury. Try to buy it and you will find that the price has gone up to 8 and 10 cents a pound loaf—eight to ten times what it cost in the days of Nathaniel Thwing.

The Department of Agriculture, as a result of recent experiments in economical bread-making, has found that palatable loaves can be obtained when many cheaper cereals, and even ground legumes, are mixed with wheat flour. The proportion used in most of the baking trials was one-fourth part of substitute to three-fourths of wheat; but this does not mean that the ratio might not have worked out satisfactorily the opposite way. It is all a question of how hungry you might be, and not of mere sustenance.

No fewer than 20 materials suitable for bread-making are indorsed by the Government experts. There is rice, for instance. Oatmeal is another. It is only within the last few years that we have come to recognize oats as available for human food—just as the British are still disposed to look upon corn as fit only for animal fodder.

What is the matter with pea-flour, mixed with wheat for bread-making? Not a thing, if the experts are to be believed. Why not use beans, dried and ground No reason whatever. Both peas and beans are more nutritious than wheat—or than any other cereal grain; for that matter.

How about cottonseed meal? An excellent breadstuff, say the experts. More nutritious, pound for pound, than lean beefsteak. The same, indeed, may be said for soy beans, which are grown on a vast scale in the Southern states. Mixed in suitable proportion with a cereal, they make an excellent bread.

The principal American cereal is corn. It is an admirable "fuel food," for running the body machine, but it lacks the elements required for making blood and muscle. The experts say that, if it be combined with ground peas or beans, or with cottonseed flour, it makes a bread wholly satisfactory as a military or civil ration.

But how about potatoes as an ingredient of our "war bread"? They are all right. The Department of Agriculture has worked out a recipe for potato bread that is highly satisfactory. Four parts of mashed potatoes and three parts of wheat flour make the dough.

In Germany potato "war bread" is a fairly old story by now. It usually contains about 30 per cent of potato flour. But potato flour, in this country, is too expensive for the housewife's use; and she cannot make it herself because its manufacture demands costly machinery. Mashed potato, however, serves the purpose first-rate, as an ingredient, so why not that?

It has long been a common practice of the American housewife to put a little mashed potato in her bread dough. A "light" loaf is thereby produced, because the yeast-germs feed on the potato starch (a first-class "culture medium" in the cooked and mashed condition), and multiply therein with great rapidity. For her, therefore, there will be nothing startling in the idea of potato bread.

Such bread (with ingredients proportioned as above stated) is not so white as ordinary wheat bread, and is somewhat coarser in texture. It is, however, equally palatable, and holding moisture better, will stay fresh a week. Made in the usual way, by the "straight dough" method, it should not be allowed to rise in the pans to more than double size, before being placed in the oven, because over-risen loaves (lacking gluten) are liable to "fall" in baking.

When lack of a sufficiency of cereals becomes manifest, the Government may require the millers to grind wheat and other grains entire, instead of depriving them of their hulls and sending merely the kernels to market. The hulls of the wheat seeds, called "bran," contain nothing of nutriment, to be sure, but in them are certain elements known as "vitamins," which in some mysterious way contribute to the health of the human body.

In the second stage of starvation things are eaten which under normal conditions would not be deemed fit for food. Take horsemeat, for example. We, in this country, may be glad to buy horsesteak before this war is over. The Germans learned to eat horsemeat during the Franco-Prussian war; and at the present time they are not disdainful of dogmeat, which is regularly sold, though in no great quantity, in their markets.

When Paris was besieged, in 1871, the inhabitants ate cats. And, when all the pussies were used up, they fell back on rats, as a last resort for meat. We should not like to eat rats, and there is no reason to suppose that we shall be driven to any such extremity; but it must be acknowledged that our reluctance to eat them is mainly a matter of prejudice.

In ancient Rome rats were highly esteemed as food. They were, indeed, considered a luxury; and in the days of Nero the wealthy patrician took pride in his "glirarium," or rattery, in which the much-prized rodents were fattened for his table. Such a rattery was ordinarily a structure of brick, divided into some thousands of little cells, in each one of which a rat was kept. When the animals were so fat that they could with difficulty be dragged out through the doors of their cages, they were killed, dressed, baked with a stuffing of crushed figs, and served in a sauce of olive oil at banquets.

Delicious? Well, rather. Doesn't the idea make your mouth water? When one realizes that each female rat produces three or four litters of young per annum, with six to eight offspring to a litter, it is easily seen that here is a possible source of meat supply almost unlimited. Fed on refuse, rats cost next to nothing to breed and rear. All that is necessary is to cultivate an appetite for them.

The third and last stage of starvation—to which, that we shall arrive, may the gods forfend!—is marked by a resort to the eating of things which furnish no nutriment, but merely distend the stomach. The Serbians, after their country was devastated by the invading Germans, are said to have been driven to eating grass. Sawdust, under such circumstances, has been used for making bread.

Happily, we can scarce be driven to any such extremities. But the progress of starvation — which, in its earliest stages, is signalized by a great rise in the cost of everything one wants to see on the table—is marked by a steadily diminishing fastidiousness in matters of diet. We may—at all events, most of us—be glad before the war is over to get provender of kind and quality which hitherto we have regarded as hardly fit to eat.

EACH MUST USE HOE TO GET TO SUPPLY HIS OWN FOOD

Anne Shannon Monroe Declares That West Is Facing Problem Such as It Never Faced Before, With Farms Depleted of Trained Workers.

BY ANNE SHANNON MONROE.

IF the fine art of visualization isn't brought into immediate use there are going to be some mighty hungry—or mighty beggary—people in Portland next Winter. It is too unkind to say it will serve them right, but what can one say to make the sleeping wake up? Once when I was teaching school I had some terribly dirty little youngsters who were not quite of the class that one can take too great washing liberties with; and others that shone in spic and span aprons, fresh from the tub, daily. Well, I got desperately earnest one morning and I gave those children a desperately earnest talk about the horrors of dirt, its disease-breeding qualities, etc.; that afternoon all my little clean children were late—they'd been so impressed that they insisted on extra baths at noon from distressed but finally yielding mothers, while the dirty ones came back, more dirty.

And so it seems to be with the great food drive question; the more we say, the more we lecture, the more we harangue, the more those already thriftily gardening go home and garden, while the lax, the let-George-do-it, the I'm-tired-of-all-that-dope crowd, they go right on, sans garden, sans realization, sans interest—and woe to them next Winter when it will be sans food!

If only these "slackers" could get it right down under their skin that potatoes don't grow in the corner grocery, that taking down the telephone receiver will not continue producing on the kitchen shelf. If only they can quit snoring and wake up and listen, and hear and heed, and believe and know that there "won't be no corner grocery" in one sense; that unless they themselves raise what they eat, or hire men to raise what they eat, or get their wives and daughters to raise what they eat, they won't eat.

Need of Crops Is Urged.

If only they can get this, now listen, get it. Imagine you have just arrived in a virgin Oregon, as your forefathers did, with an ox team and provisions enough to last till you get a crop in; that all around sweeps a wilderness and that unless you raise food you won't have food; get down to the positively primitive, positively elemental, positively first state of the pioneer, and look about you and see waste places, and starvation unless you hoe and plant and dig. How many hours would you stand gazing in a store window or going to a movie, or doing anything else under the sun that had no food result, until your next Winter's food was provided? Did the passengers off the Mayflower spend much time gazing at scenery? They went pretty steadily to putting in crops; they knew no one was going to forage for them; their food was up to them.

We are in a parallel position right this minute: Mr. Man, lighting your cigar with such nonchalance, you'll jump for a potato next Winter, and you'll take it off of some one else's plate, too, and feel mighty sneakin' about it, if you're truly a man, unless you meet that spud question right now; this is worse than salvation, you don't merely have to have it, you have to see that others have it. It's self-preservation and race-preservation.

The human animal is a natural born storer; he's like the squirrel by nature, he hoards and puts by for the Winter days; but for so long we've let the poor old farmer stagger on under the burden of feeding us, that we have lost the elemental instinct of feeding ourselves and unless we root around mighty hard and dig it out and patch it up and put it to use ago—well, you know the old fable of the easy grasshopper and the thrifty ant—was it an ant? When the Wintry days came the lazy grasshopper couldn't get a loan from the thrifty ant and so he died.

Being Hungry Is No Joke.

It's a bore; it's a joke; it's something for the other fellow to attend to; it's something the farmers will attend to;; wee'll hold a convention and vote that the farmers do it; we'll hold a meeting and vote that the schoolboys be given their credits and allowed to go do it; we'll do every mortal thing but do it ourselves.

Now just listen; this is no joke; and being hungry is worse than a bore; you're a slacker of the first degree if you think you can sit back in your ease and use your money to buy food; you can't eat dollars; you can't chew gold and silver, you can't run your body engine on paper bills; it's a question of getting food. Food—do you get me? Food. And if you are worth a million or a dollar, you've still got to be responsible for your own food.

The world is already short on wheat; Europe is already hungry; you know this; you read it every day and indifferently you turn the page to see whose name is in the last list gone to the Presidee, or who's playing in the movies or whose picture decorates the society page, or about Mike Gibbon's ring career, or how the Cubs defeated the Reds. You cut the tiresome stuff and turn to real news; but some morning you'll wake up to the awful news that your breakfast is short of wheat cakes.

Nation Must Feed Itself.

Now, listen: get this under your skin; the whole Nation has got to feed itself, and feed the armies of the allies, which now include our own boys. This food can't be bought—it has to be got out of the soil by means of sun and air and seed and your labor. This Fall there will be no canned vegetables in the grocery store for you to buy; they will all go to the Army; there will be no canned fruits; they will all go to the Army; there will be no canned meats—hams, bacon—it will all go to the Army; you won't be able to buy it for love nor money; there won't be any for you to buy; if you are to have these things you've got to raise them yourself this very Summer; and start mighty quick; you'll feel nice trying to pinch it off the soldiers' rations. Like stealing candy from the baby!

The world has fallen back on the farmer to save it, and lo, the world finds that the farmer has slipped from under; he was a funny old cuss, with his long whiskers, chewing his straw and saying "I swan"! That's about the picture most of us had when we gave him a thought, which wasn't often. We knew there was a low cry coming from the soil: "Give us roads for our horses to travel over, give us a profit for our produce, give us a chance to pay interest before we lose our farms"; it was a low, monotonous, unending sort of wave that never got up to a crest, never got up to a breaking point; we yawned; we weren't interested; we went on taking his big interest, foreclosing his mortgage, driving his sons and daughters to towns, for variety, the food speculators taking his profits, the world taking their living, the farmer taking it as his sorry lot—only that low, unending wave of monotonous complaint. Then suddenly came the cataclysm—the world is starving!—we turn frantically to our old neglected, frustrated, hopeless friend, and we are surprised to find that he's stepped from under, that his boys have thrown down their rakes and spades and gone off to enlist—glad to get away from the farm—anxious to follow the country's call; we find great waste lands, we find neglected projects, we find inertia and listlessness. We are astonished that the farmer isn't right there, like another Atlas, holding the world on his shoulders, gladly carrying us.

Pleas Are Soon Forgotten.

We forget how he cried to us, how his wails ascended to heaven! Robbed by the middlemen, left to stagger through hub-deep mud, money at ruinous interest, mortgages foreclosed—all his wrongs through all the years have made a wave that beat against a stone wall of city indifference; and now the city turns, in alarm, and cries, "Where is our friend, the farmer? For the farmer is not on the job; not enough of him; not vitally enough.

Why should he be? What has the world given him to make him hold fast to the task of feeding it?

Nine-tenths of the melodramas are based on the old farm lost through mortgage; the only thing the audience seemed to get out of it was a good cry when the old folks must leave. Now they are getting another answer.

It is now up to the city man to meet this problem, hand in hand with the practical farmer; to say to him of the soil, whose brain has not been developed for the purpose of sharp trading: "We are partners with you; we will make your way possible."

"We will see that you get easy money, tools, cleared land, and equipment; and we will see that you are not robbed when you bring your products to market."

Then the country man will have to bend his energies as he has never bent them before, and work—as a farmer, yes—but as a patriot, too. He will have to get the viewpoint of the savior of his country, putting bread into the mouths of his country's soldiers. He will have to go at this patriotically as well as practically, and do what he would not do for himself alone, and the farmer, assured of the honest city man's co-operation, will do this.

Each Asked to Raise Own Food.

In a nutshell, the one big cry of the whole Nation from Atlantic to Pacific is for every mouth that eats to be accommodated by a pair of hands that will actually raise its own food. In cases where the individual can't do this literally, he must place the equipment in the hands of a substitute; he must get a tract of land and equip someone else to do his work for him so that he can get his own actual vegetables for Winter canning. Every human his own provider—that is literally the problem of America today. There are men and women who haven't the money to buy equipment and seeds—those others who can't toil with their hands must find these people and effect an arrangement that will be satisfactory; you must literally feed yourself.

Then the larger thing to be done for our men of capital is to put the waste areas of the Valley and Eastern and Central Oregon into crops that will mature on this new raw land. Barley and beans will do well here. The Summer-fallow land will grow these things, and much of it corn. About Ontario in Eastern Oregon and in the Willamette Valley can be grown the finest corn ever raised in America. Everyone with a little ground can keep a dozen hens. They will rustle for themselves in the Summer, and table scraps will help keep them. A couple of pigs wouldn't be a bit of a bad idea to butcher next Fall; that is, if you want any pig meat next Winter. You can't steal it off the soldier boy's rations. Ducks do well where there is a river or pond; turkeys for outlying districts. If possible keep a cow and sell milk to your neighbor.

Dairy Situation Alarming.

Already the dairy situation for the Summer is alarming. Dairymen are selling their milk cows because they can't possibly pay the high cost of cow feed and come out even after paying the deliveryman's profit; keep a cow, deliver milk to your neighbors; or, if you can't do this, take an interest in establishing a municipal milk bureau where the dairyman's product will be handled at a rate that will make his business possible. If you don't do this, if you don't take action, your babies will be crying for milk before the Summer is over. You will wake up too late.

Dig out all the old fruit jars and break the necks off all the bottles on the place, and be ready to can vegetables; all the cans will go to the canneries for the soldiers—there won't be any cans for you to buy later on. Utilize every receptacle you've got—fill everything with food and more food, and get ready now. Don't prepare to can any fruit whatever. Dry the fruit. Save your cans for your vegetables. Cabbage make into sauerkraut; treat beans in the same way. The big farmers of our West have never raised vegetables. They, too, like you apartment people, live out of cans. Well, that day will be gone soon. You can't do it any more. The farmers must make their own gardens this year, and can, can, can, and dry, dry, dry.

Own Wants Must Be Provided.

The Government has placed a $2,000,000 order with Portland canneries within the past few days, an order for the soldiers, and the Government will see to it that the canneries get the cans. Your demands will have to go begging; your wants you must see to yourself; your own canned goods you must provide; the public utilities that have formerly supplied you will all be busy supplying our boys over there or our allies' boys. We home people won't get a look in. And we oughtn't to.

Now every food-slacker who feels inclined to pass this problem up, just consider these figures: Twenty-five per cent of the area of the United States lies west of the Rocky Mountains, and only 6 per cent of the population. We need—terribly and alarmingly—men and money. Out of our poor little 6 per cent have come the heaviest enlistments. Our stalwarts from the farms have gone over to the fighting men.

We were crippled all the time—we needed men before the war, and now we doubly, trebly need them. If you don't raise your own food—well, you'll be raising Cain looking for it next Winter, but where you'll find it, unless you sneak it off a soldier's rations, I don't know and no one else knows. Take the situation—not to heart—but to stomach.

OFFICERS OF PORTLAND EPWORTH LEAGUE WHO WILL TAKE PART IN DISTRICT CONVENTION MAY 18-20.

Joel R. Benton, President. Willis Vinson, Secretary. Ida Matson, Dept. Of Social Service.

CRONE PHOTOS.

An event anticipated by the Epworth League members of Portland district is the annual convention to be held in Centenary Church, May 18-20. A feature will be an address by Bishop Hughes. Following are the officers: District Superintendent, Rev. William Wallace Youngson, D. D.; president, Joel R. Benton; department of spiritual work, Fred J. Schnell; department of world evangelism, Will H. Warren; department of social service, Ida Matson; department of recreation and culture, Leva Jackson; superintendent Junior League, Minnie L. Macey; secretary, Willis Vinson; corresponding secretary, C. D. Chilson; treasurer, Oliver J. Gill.

Public Library Notes.

OREGON'S wild flowers—especially the early Spring ones—may be known to anyone who will visit the circulation department of the Central Library.

Carolyn K. Sweetser, of Eugene, wife of the well-known naturalist and botanist, Professor Albert R. Sweetser, of the University of Oregon, has done some of the familiar flowers in water colors and lent the collection to the Library for exhibition. The coloring is very true to life and beautifully done. Both the common and scientific names are given, with the reasons for such naming. The originals could easily be identified from a study of these water-color drawings.

Spring beauty—one of our earliest—is there. The Latin name—Dentana tenella—from a word meaning tooth, refers to the underground portion. The wake robin, or trillium, the three-leaved lily on a flower stalk, changing from white through rose to purple, is a familiar flower friend. This differs from the purple trillium of Eastern Oregon principally in the long leaf stalks. The mottled trillium is without the flower stalk, it is white, and the leaves are often mottled.

Purple lambstongue of the southern part of the state varies from the Coast lambstongue chiefly in color, the latter being pink rather than purple.

The lambstongue, so called from the shape of its leaf, is a pale yellow in color. It is also called adderstongue, because of its pointed anthers, and dog-tooth violet from the toothlike shape of some of its bulbs. The interesting feature of the name is that it is not a violet at all, but a lily.

The municipal reference library has considerable material on the two-platoon system, including: National Board of Fire Underwriters—Shame of Pittsburg; Report of New York Bureau of Municipal Research on Proposed Two-Platoon System in San Francisco, 1916; Report of San Francisco Real Estate Board on the Proposed Two-Platoon System in San Francisco Fire Department, 1916; National Board of Fire Underwriters—Statistics for Last Five Years Which Give Fire Losses of All Cities of Over 20,000 Population in the United States; Views of Fire Chiefs Pro and Con as Found in Volumes of Fire and Water Engineering.

The periodical department of the Central Library wishes a single copy in good condition of Industrial Arts Magazine for February, 1914. Call Main 1256 or A 6378.

"H. G. Wells, Bernard Shaw: Rationalistic Outlooks" will be the subject of Professor H. G. Merriam's last lecture in the course on "The Outlook of Life of Contemporary Men of Letters," to be given in room H on Tuesday evening, May 1, at 8 o'clock.

Professor H. B. Torrey will deliver his last lecture in the course on "The Life of the Sea" in Library Hall on Thursday, May 3, at 8 P. M. The subject will be "Along the Northwest Coast, III." The lecture will be illustrated.

Mrs. Mable Holmes Parsons, of the University of Oregon, will meet her class in the drama on Saturday, May 5, at 7:45 P. M., in room H of the Central Library.

LOCAL BLUE LAWS FOUGHT

Dan Kellaher Will Appear Before Eugene Council Monday.

Dan Kellaher, candidate for City Commissioner, whose campaign cards bear the explanatory note, "The man who killed the Sunday blue law," will go to Eugene Monday to appear before the City Council of that city and seek to have the old "blue law" ordinance, which has kept Eugene closed on Sunday, repealed. Mr. Kellaher will be accompanied by A. R. McKinley, manager of the Portland office of Brunswick-Balke-Collender Company.

Eugene still retains the "blue law" ordinance, notwithstanding the state blue law was repealed at the last election, and Mr. Kellaher, who made a strong fight throughout the state at that time, is seeking to have the cities where the blue law ordinances are effective conform to the state regulation.