

loyal to the Vardaman-Russell-Robertson combination of corporation hunters. These newspapers contain the most extreme attacks upon the "outlaw" fire insurance companies and the most extravagant praise of the Revenue Agent. The larger dailies of the cities within the State and from the big cities outside the State, which are boldly or quietly opposed to the attitude of the State toward corporations, circulate but little among the outlying farms of the hills.

But powerful forces are rapidly organizing to reach this region. Neglect of it by the leaders of enlightenment and righteousness has allowed ignorance and intolerance to govern the State for many years in the person of the demagogue. The wide insistence upon better education of the masses has resulted in the last few years in the establishment of many consolidated high schools and agricultural schools that have already stopped the progress of the demagogue. In the last Legislature each day saw an increasing weakness on the part of the formerly all-powerful faction that represented the narrow-mindedness and class hatred of the misguided and demagogue-ridden small farmer. Even "Vardaman's Weekly," which has a wide circulation among the hills and reads like the address of some radical agitator in

London's Hyde Park, is not everywhere regarded as sound economic and political gospel.

Some of the most patriotic and forward-looking Mississippians are setting aside many of their regular duties to devote their attention to offsetting the evils that have sprung from these years of demagoguery. Ex-Governor Charles H. Brough, of Arkansas, a native of Mississippi and a graduate of Mississippi College, has been going up and down the State pleading with the people to change their laws and their attitude toward capital. Mr. Barney E. Eaton of Gulfport, George R. James of Memphis, and J. T. Thomas of Grenada are also trying to guide the citizens from the public stump, pointing the way to sound farming and business principles. But the man who is doing the most for the future of Mississippi to-day is, in my opinion, C. H. Markham, the remarkable President of the Illinois Central Railroad, which operates extensively in this State. His company maintains "Demonstration Farms" throughout the State. His agricultural experts lecture and display moving picture reels in the schoolhouses along the I. C. and the Y. & M. V. Railroads. "Diversify; live at home; use well-bred stock; produce and drink milk; improve your poultry." That's his message. In public speeches, in paid advertisements, and in

multitudes of personal letters he has reached almost every district and corner of Mississippi. His frankness and his fearlessness have won thousands of small farmers to a belief in him and his road as agents of public service. More men of this type, and Mississippi would meet the Vardaman issue, soon to absorb the attention of the State, with perfect confidence—the former Senator's return to Washington would be forever barred. In a recent letter to the writer President Markham said:

"The ease with which demagogues sometimes succeed in misleading the people is enough to shake one's belief in the virtue of democracy, but my faith in democracy has come through all such tests thus far unshaken; I believe in the ultimate triumph of justice wrought by public opinion, when the public has all the facts and is given opportunity to pass sane judgment upon any issue. But we cannot desert the field and turn it over to the enemies of progress. The cause of righteousness demands fighters."

To many of us lovers of this misguided State of sweet and glorious memories who are fighting this battle from the stump, the press, and the pulpit, it is inspiring to think that such men as President Markham are enlisted in the cause, and we await with confidence the issue of the conflict.

CLEAN MILK FOR THE METROPOLIS

BY SHERMAN ROGERS

INDUSTRIAL CORRESPONDENT OF THE OUTLOOK

ICY blasts swept Manhattan from the Battery to the Bronx. Surface-car traffic was entirely suspended. Broadway was practically devoid of vehicular traffic. Great drifts of snow covered every thoroughfare in the city. A great majority of streets were absolutely impassable.

We prepared our breakfast in our upper Manhattan apartment. A terrific wind rattled every window in the apartment like something "possessed." The thermometer registered below zero. The lady across the hall, her fingers blue with cold, assured us it was the worst ever in the seventeen years she had lived in New York City. Newspapers were not delivered that morning—but, to our intense surprise, *milk bottles were*. We were at the end of a milk route; our milk generally reached us about seven o'clock. On this morning before nine we heard the milk bottles rattle, less than two hours late, and our driver assured us that he had served every customer, leaving the barn at half-past two, in the worst storm he had ever experienced.

I tried to picture a man huddled up in a milk-wagon breaking through snow-drifts from two to four feet deep, ac-

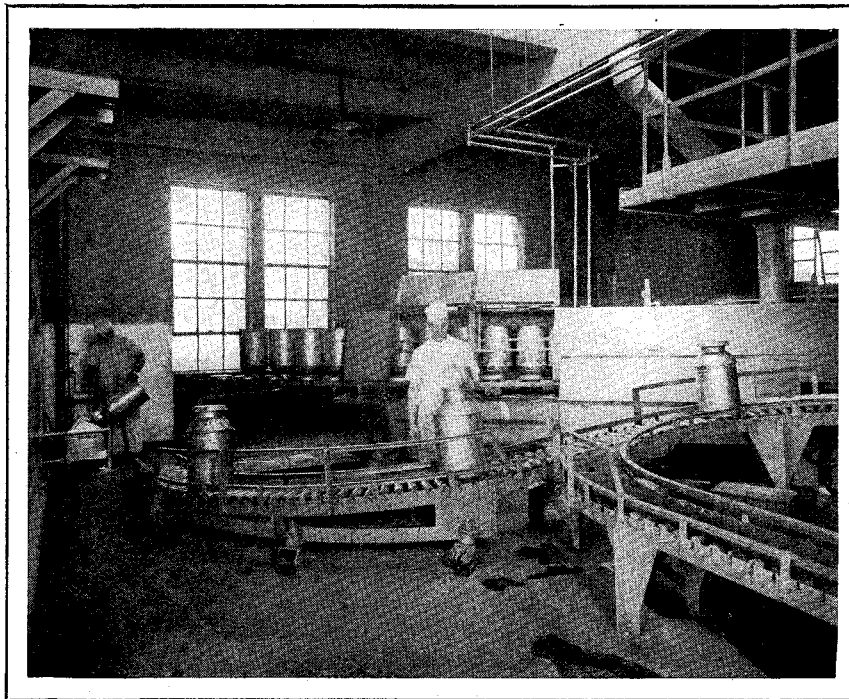
tuated by only one impulse, and that to serve the women and children on his route with their milk supply. Since that time I have marveled that a city the size of New York, with its teeming millions, should enjoy uninterrupted milk distribution all seasons of the year. And as I write this I cannot help a lump from rising in my throat to think that some of the milk-wagon drivers of New York City should have sullied a record that any man or body of men in the world could feel wondrously proud of by voluntarily stopping the distribution of milk throughout the city. Unfortunate? Yes. Because a few heated, blind moments, temporarily at least, turned the sympathy of milk consumers against men who were admittedly a corner-stone in service to every family in the great metropolis. I want it to be only temporary, and I hope that the American public will close the record of those few weeks when the men were on strike. Forget about them, or, at least, weigh them in the balance with the valorous work performed uncomplainingly by milk-wagon drivers outside of those few weeks above mentioned.

They are deserving of as much credit as any other class of citizenry in New

York City in maintaining a service that the health of the city depends upon to such a large degree.

Yes. Picture these milk-wagon drivers in rain and sleet, snow and ice, bad wind or fair weather, leaving the milk depots at three o'clock every morning. No matter what the obstacle may be, milk is on hand—possibly a few minutes late, or, under practically impossible conditions, an hour or two—but it always arrives. Certainly these protectors of public health are deserving of as much credit as any other element of American society.

The morning of the great blizzard set me to thinking. What kind of an organization was behind the milk-wagon driver? Milk did not pour out of the clouds; there must be prodigious efforts continually performed by men and organizations that handled the milk before it was delivered to the wagons at 3 A.M. On this morning train traffic was practically tied up in local sections all over the State of New York, yet we received our milk; not milk to be afraid of, but the purest, finest milk possible to be obtained. According to the unqualified statement of Dr. Royal S. Copeland, Health Commissioner of New York City,



Courtesy Sheffield Farms Co.

RAW MILK FROM THE COUNTRY—INSPECTION BEFORE PASTEURIZATION. SHIPPING-CAN WASHER AND DRIER IN BACKGROUND

"the most sanitary and efficiently handled milk service in the world is rendered by New York milk distributors, whose performance is unsurpassed and unsurpassable. The pasteurized milk distributed in New York is absolutely free from pathogenic germ life, and, as a result, infant mortality in New York City has been reduced from two hundred and forty in 1891 to seventy-one last year per thousand—a decrease of more than seventy per cent." Other cities may come up to New York in many standards of public service, especially the urban centers of the Far West, but when it comes to milk New York stands in the forefront of any other metropolitan city.

The New York mother can feed her infant, no matter how young, with the pasteurized milk delivered to her door every morning without the slightest fear that there may be pathogenic germ contamination; surely a great load to be lifted from the shoulders of the average anxious mother.

Pasteurization did not happen overnight. Behind the scenes of the experimentation and introduction of commercial pasteurization of milk lies one of scientific, sanitary development, every bit as interesting and startling as the most interesting stories of modern sanitary campaign waged by General Goethals in the Panama Canal Zone. The story of American milk pasteurization is one of indefatigable endeavor and unstinting sacrifice of public-spirited men. Pasteurization was first introduced in this country in an experimental way by Nathan Straus. There is a story behind Mr. Straus's deep interest in sanitary milk distribution that demonstrates that oftentimes a seemingly insignificant incident results in revolutionizing entire industries.

Mr. Straus owned a farm. He had a herd of prize milch cows. One of his pet cows died, and an autopsy conclusively proved that the death of the animal had been caused by tubercular infection. Investigation proved to Mr. Straus that the infection of his pet bovine had been caused by a man with tuberculosis handling the hay fed to the cow. If the eating of a tubercular infected handful of hay could cause the death of the animal, what, Mr. Straus immediately asked himself, would happen to the unsuspecting public that consumed the milk given by such a cow? He immediately began to investigate the Pasteur method of elimination of pathogenic bacteria by a modern scientific invention called pasteurization. In 1892 Mr. Straus established a milk pasteurizing laboratory and distributed milk from five depots, which operated throughout the first year and steadily increased until commercial pasteurization of milk became a fact in New York City. Mr. Straus was bitterly attacked, but kept up his courageous battle, and the New York public in particular, the American public in general, owe Mr. Straus a debt of gratitude that they will never be able to repay.

In 1902 Mr. Loton Horton, President of the Sheffield Farms Company, Inc., became deeply interested in the pasteurization of milk on a commercial basis. Investigation proved that in Berlin, Germany, where the pasteurization of milk was compulsory, infant mortality had decreased over sixty-six per cent. Mr. Horton went to Europe; he became thoroughly satisfied that pasteurization on a commercial basis was not only possible but absolutely necessary for the protection of public health. He began a remarkable series of thorough tests, employing the most noted bacteriologists in

America. Mr. Horton, without regard to expense, experimented until he had brought commercial pasteurization to a stage where the elimination of all pathogenic germ life was a positive fact. He was not satisfied with the twenty-five-minute retention of milk at a temperature of 146°, and so, as a final test for absolute certainty, turned over a pasteurizing plant at 130th Street and Broadway, New York City, for experiments, and there, with the assistance of Dr. Park, Director of the Research Laboratory of the Department of Health, New York City, and Dr. Rosenau, of Harvard University, various comparisons of milk, held at different temperatures for various periods of time, were made.

I asked Mr. Horton about these tests; I drew his attention to the fact that, even though laboratory tests might not disclose the presence of germs, it might still be possible for them to exist in some cases. "Quite so," he admitted; and then enthusiastically added, "We proved the total absence of living pathogenic germs by using hundreds of pigs in our experiments."

"Pigs?" I queried, astonished. "Great heavens, you don't class the frailties of a human with the ruggedness of pigs? Pigs kill rattlesnakes by shaking them to death; they are bitten, but do not become poisoned. There certainly has never been a human being that could take a rattlesnake in its teeth and shake it to death, and be immune to its bite while doing it."

"Oh," he replied, "I don't mean Poland Chinas; I mean guinea-pigs."

This was some relief to me. Mr. Horton continued: "You see, guinea-pigs very easily become infected by pathogenic germs. They are extremely sensitive. We took no chances. We finally found, after exhaustive tests, that by inoculating the pigs with milk subjected to a Fahrenheit temperature of 145° for thirty minutes not a single trace of disease-breeding bacteria remained. We therefore leave our milk exposed to 146° Fahrenheit for fifty minutes, which eliminates any possibility of a living pathogenic germ."

Personally, I have always been convinced of the efficacy of pasteurization; yet I have heard so much about "milk from contented cows" that I put one more query: "Would it not be possible to install the latest methods of sanitation in country dairies, whereby the care of milk-producing cows would eliminate the chance of their being infected, and thereby save to the public the added cost pasteurization causes?"

"Well," replied Mr. Horton, "that is being done, and in some places with a great deal of success. However, we find the finest herds in the world existing under the latest sanitary conditions, and still the owners of these modern farms are continually forced to destroy their cattle because of the discovery of tubercular infection."

This statement is verified by the ex-

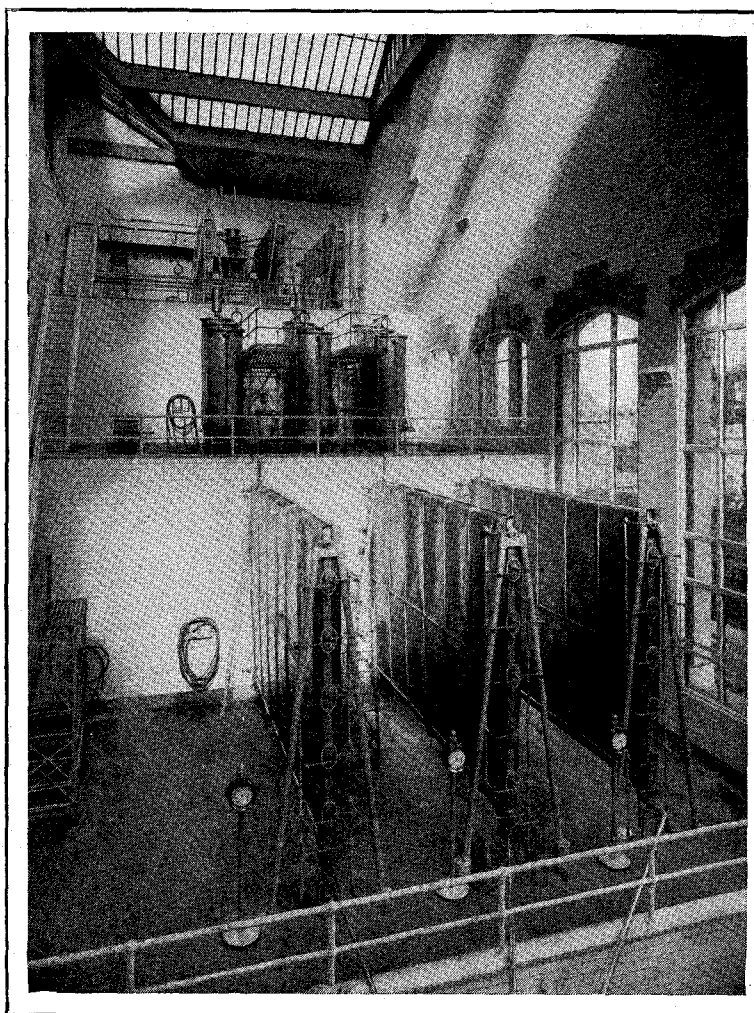
perience of the late J. Pierpont Morgan, who had a herd composed entirely of pedigreed animals. Mr. Nathan Straus, in his book on "Diseases in Milk," points out that several years ago a third of this valuable herd was killed on orders cabled by Mr. Morgan after it had been discovered that they were infected with tuberculosis. Mr. Straus had written shortly before this pointing out to Mr. Morgan that his physician had made a report on the Morgan dairy farm and found it to be the best example in the country of a scrupulously clean, sanitary farm, but directed his attention to the fact that he did not pasteurize his milk. I should imagine that it was some shock to Mr. Morgan, six months later, to learn that one-third of this model herd had tubercular infection. This certainly proves that under the most favorable circumstances milk from even the most carefully selected cows is not entirely free at all times from the presence of living pathogenic bacteria.

Mr. Horton so impressed me with the necessity of proper pasteurization that I requested permission to go through his seven large pasteurizing plants in Greater New York.

I received the surprise of my life when I entered one of the pasteurizing plants and learned that milk receives more careful attention in a pasteurizing plant than a patient receives in the most modern hospital. I found a "factory" where, from the time that the milk began its journey through the plant, it never touched human hands. Even better, the milk does not touch human hands at any time, from the farm to the consumer.

When the Sheffield Farms Company, of New York, first built their great pasteurizing plants, they were severely condemned in many quarters for spending so much money on sanitary plants, which cost must necessarily be added to the price of milk. Just as well argue that New York City should save the greater portion of the \$170,000,000 now spent each year on supplying its residents with pure water, when they could just as easily pump their supply from the upper Hudson River and save this great expense to the public.

As I started my journey following a can of milk through the plant, the superintendent outlined to me the trip the milk had already taken from the farm to the city. Dairymen, under State supervision, had delivered their milk to the creameries, and the milk, before it was placed in the refrigerator cars, had been thoroughly inspected by State authorities. It was then brought to the city in cars properly iced, held at an even temperature, rushed from the city's freight station direct to the great pasteurizing plant, where it was immediately taken on a conveyor to the top floor of the plant, and started on its journey to the bottle on the ground floor. At the top of the station, just before the milk is dumped from the cans into a thoroughly sterilized hopper, I noticed a



Courtesy Sheffield Farms Co.

PASTEURIZING ROOM—CAPACITY SIXTEEN THOUSAND QUARTS PER HOUR

Top landing, milk heaters—cold raw milk raised to 146° F. Next landing, holding cylinders—hot milk retarded fifty minutes. Next landing, coolers. Next landing below and on street level, bottle fillers and cappers. A bottle filler is shown on the succeeding page

big man lift a can top off and smell it. This aroused my curiosity. "What's he doing?" I asked the superintendent.

"Ask him. He's one of the most expert men on the job."

Just as I reached the "expert" he yanked a ten-gallon milk-can out of the conveyor. "What's the matter with it?" I asked.

"Tainted," he snapped.

Personally I can detect sour milk a mile off, but I was unable to notice the slightest taint in this can of milk; but this expert "smeller" apparently was a better "expert" than the State authorities who had inspected it some hours earlier.

"Do you find many?" I queried.

"I find them now and then. That's what I'm paid for. That milk could pass through and nobody would ever know the difference." But the "factor of safety" consideration "gets the tainted can."

The milk passes through the hopper into a centrifugal clarifier, which removes every particle of foreign matter that may be in the milk. Mechanically clean, it then flows into a tank, from which it passes to the heater of the

pasteurizing equipment. Here the milk is carefully regulated to feed eleven thousand pounds an hour into its respective pasteurizer.

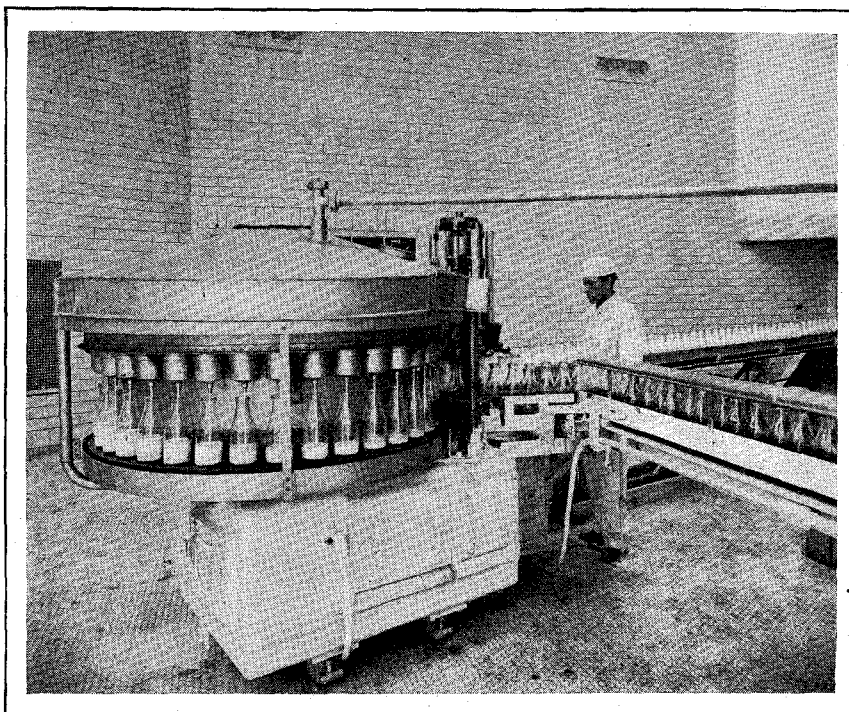
"Why this control?" I asked.

"Well," he said, "we've got to make it fool-proof. Men may get in a hurry. Under this system they can't. The job is done right whether they want to do it or not."

The milk then flows down over the outside of a series of sterilized tubes, its temperature being raised to between 145° and 146° Fahrenheit. The time of raising to this temperature is approximately one minute, and again the controlling machinery comes into use. The milk flows from the heater through a system of holding tanks, automatically requiring at least fifty minutes to pass through, the temperature never varying over one-half degree in that entire time.

I noted that the machinery was regulated so that under no circumstances could the milk pass through these tanks without being held at least fifty minutes. I asked, "Why all the great care?"

"Sometimes a workman may want to go to church or keep a date with his 'best.' He cannot shirk his duty under



Courtesy Sheffield Farms Co.

A ROTARY FILLER AND AUTOMATIC CAPPER—CAPACITY EIGHTY-FOUR BOTTLES PER MINUTE

A measured amount drops in each bottle. The milk flows to this machine from the cooler shown on the preceding page.

this regulated control system. We hold the milk fifty minutes instead of thirty, as is supposed to be sufficient, allowing this difference as another 'factor of safety.'"

From the holding tanks the milk flows down over a cooler, which reduces its temperature to 40°. Here a system of gauges and automatic controls eliminates the danger of any possible error on the exact degree of temperature, there being three gauges on each tank, or holder, which again guarantees absolute protection from possible human error. From the cooler the milk passes into a tank with an electrically driven agitator, which supplies the mechanical bottle and can filler.

The pasteurized milk is then bottled by a newly invented machine which fills the bottles and caps them at the same time with wonderful rapidity, eliminating the necessity of a human hand coming in contact with either bottle or paper cap in the complete operation.

Not only does a human hand never touch the milk at any time, from the pasteurizer to the bottle, but even the air in the milk-room is thoroughly purified. Every particle of air is filtered before going into the room, and an automatic exhaust lets the air pass out; but it is absolutely impossible for a single particle of air to get back into the room without going through the filter.

I remarked about this. "Well," replied the superintendent, "it would certainly be foolish to spend millions of dollars in machinery and equipment to guarantee safety from germ life, and allow the milk to come in contact with germ-laden air. You see," he added, "germs are as fine and about as light as dust, and naturally are carried through

the air. Well, they don't come in contact with our milk. And then," he confided, "the 'Old Man' is a crank on bugs. He fights bugs like Foch fought Germans. He's around here about half the time himself, and he'd blow up the factory if he found any place where a bug could get in. Of course I mean germ bugs, and," he added, "as a matter of fact, any other 'bug.'"

Pasteurizing from the holding tank to the bottle takes place in an enormous room completely tiled, with the overhead a solid expanse of glass. It is light enough in any part of that room, or any corner, to detect the tiniest flake of dust. I believe that was the most spotlessly clean room from ceiling to cellar that I have ever been in in my life. I have been a chronic objector for many years to the price of milk, but since going through these plants and seeing the immense amount of handling and money spent for protection of New York children, millions spent in modern sanitary equipment, I can begin to realize why there must be a difference between the price to the producer and the price to the consumer.

As we left this pasteurizing room I heard a great racket. It sounded like a boiler-shop on a busy day. It was the clinking of bottles—thousands of bottles. "Yes," smiled the superintendent, "here is one of our biggest problems, and one of the most costly that enter into milk distribution."

Bottles came in in crates on conveyors, literally by thousands, were plunged into a steaming vat, thoroughly cleaned and sterilized by forced pressure, and washed in a strong alkali solution. They then went through a vat where they were rinsed in clean, hot water at

a temperature of 160°. As they came out the bottles were inspected; they then went through a sterilizer, where they were subjected to boiling water of 212°, and from the time they leave this sterilizer until they are filled and capped no man's hand touches them. After being sterilized they pass over electric lights, where they are further inspected. When filled and capped by the automatic machinery, they again travel on conveyors to the inspection room, where they are again inspected under electric lights and pass several experts, who now and then take a bottle out of the conveyor when they find a speck that has still got by, although this speck of dust has been sterilized. The inspector grabs it with as much enthusiasm as if it contained deadly bacteria.

I can bear witness to the fact that the bottles are washed in real hot water. I touched the bottom of one of them as it left the sterilizer, but I did not touch it for long. With a howl of pain, I asked the inspector why it was necessary to have the bottles so hot.

"To kill the bugs," he answered.

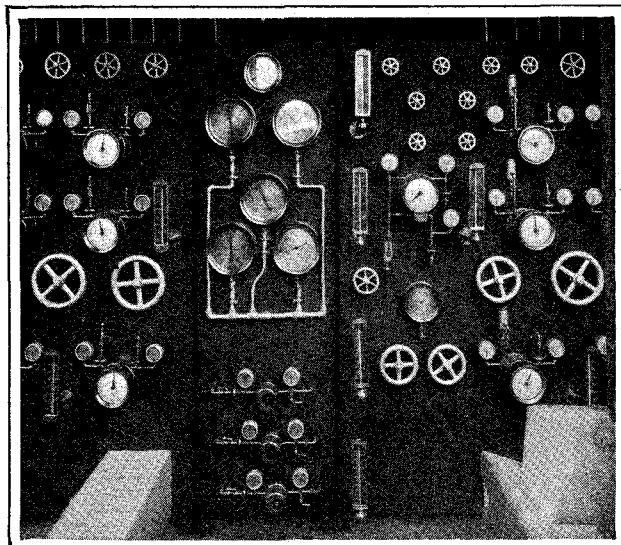
"But," I remonstrated, "it doesn't take 212° to kill a bug, does it?"

"No, it doesn't," he answered, dryly; "but, you see, the 'Old Man' always makes us observe the 'factor of safety.'"

A very interesting part of the milk distribution is the loading of the wagons. A driver drives up to the loading station platform, and in less time than it takes to tell it he has the necessary number of bottles and is on his way, making room for the next one. It is hardly necessary for him to stop his horse, the operation is so rapidly performed.

In connection with the cost of milk distribution, the delivery of a quart of milk by a driver who travels many miles and climbs from a hundred and fifty to a hundred and seventy-five flights of stairs, which are generally dark when he makes his rounds, naturally incurs a great expense even under the best-organized system of delivery. I have made many inquiries at department stores, and find the average cost of delivering a package to a customer, from a needle to a suit of clothes, is between twenty and twenty-four cents. The cost of delivering milk does not exceed twenty per cent of this figure. It is interesting and illuminating to know that the milk-distributing firms make the same profit selling milk in bulk at nine cents a quart at their stations throughout the city that they make from exactly the same grade of milk delivered to the consumer's door at fifteen cents a quart. There is food for thought in this fact, although there is a possibility of germ contact in containers used to hold loose milk, and Dr. Copeland strongly advises the use of bottled milk from a standpoint of absolute safety, even though more costly.

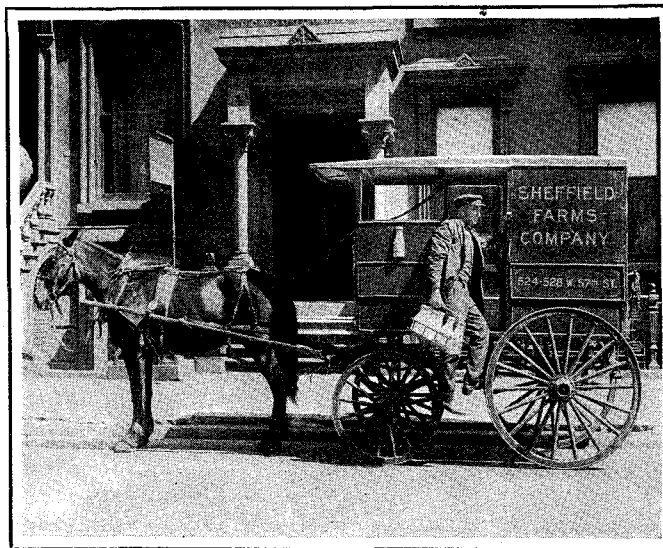
Bottles! The story of bottles is a startling one. Bottle breakage costs the Sheffield Company alone over six hundred thousand dollars a year. If the



Courtesy Sheffield Farms Co.

STEAM PRESSURE REGULATORS AND GAUGES

This picture shows one of three sections of similar gauges in the Brooklyn plant of the Sheffield Farms Company. These instruments are the controls which automatically govern the duration and the temperature of the process of pasteurization



Keystone

DELIVERING MILK IN THE CITY

The milk industry, with all its improvements, as evidenced by the elaborate system for controlling the pasteurization of milk, shown at the left, is still conservative in its city delivery system, as indicated in this picture

average housewife realized that the milk bottle she is often so careless with costs from five to six cents, she would probably handle it with the care it deserves. I have been literally amazed at the terrific cost of broken bottles to the milk consumers of New York City. I suppose that holds good for every city in the United States. If a cat sets up a howl in the back yard, a milk bottle is the first object sent after it. I have seen many times in my three years of apartment life in New York City bottles carelessly thrown on dumbwaiters, resulting of course in many of them being broken. I have seen superintendents of apartment-houses throw the bottles on floors and break them, as if they were newspapers instead of precious five-cent pieces.

Walking down Ninety-fourth Street, near Central Park West, I heard the familiar rattle of broken bottles as an ash collector threw a can of refuse into his wagon. I gazed at the ash-cart. There were at least twenty-five milk bottles visible, and at least half of them broken. "What are you doing with those bottles in those ash-cans?" I asked, amazed at this wanton destruction.

"I've got no time to monkey picking the bottles out of these cans. If the people in these houses haven't any more sense than to throw these good milk bottles into ash-cans, I should worry. I find hundreds and hundreds of these bottles every day; half of them are broken in the handling of the can; many are broken when the ash-cart is dumped, and I don't care what happens to the unbroken ones after that."

Here are thousands of people kicking about the cost of milk, and yet these very same people are adding tremendously to the cost of the milk by throwing their empty milk bottles away like potato peelings; and every time a housewife breaks a bottle she adds a nickel

onto her milk bill; indirectly, quite true, on the weekly bill, but certainly, directly on her monthly bill. A little bit more care in the handling of bottles by the New York milk consumers would save them around a million dollars a year, considering the total milk distributed in the city by all companies. One milk authority assured me that two million would be a closer estimate.

Europe paid American progressive ingenuity a fine compliment recently. The greatest milk distributing firm in England, the United Dairies, Ltd., desiring to adopt the best scientific and sanitary methods in diminishing infant mortality in London, sent a commission, including some of their own directors, to investigate the leading pasteurizing systems of America, as well as Canada, and, on returning to London, they wrote Mr. Loton Horton as follows:

We were profoundly impressed with the methods in operation in the best dairies in all parts of your great continent, but, with a very thorough knowledge and appreciation of these, we have no hesitation in ascribing to your methods and work the foremost position in the world, and we should indeed be happy if, with your kind guidance, we were able to introduce and popularize these methods in England.

It is because we are convinced that your system best meets the demands of hygiene, promotes child welfare, and avoids culpable waste of milk that we are constrained to ask you to add to your present heavy burden of responsibility by assisting us out of your great experience in the task which lies before us of improving methods in this country.

This is indeed a sterling tribute to American leadership in protecting the public against unwholesome milk.

There is a human interest story behind the awakening of the great English

dairy firm in American methods of milk pasteurization. Mr. Nathan Straus had bombarded the English public for years regarding the almost criminal negligence displayed by English authorities in protecting the London public from disease-laden milk. A peculiar circumstance aided in bringing about a successful termination of his efforts.

Dr. Royal S. Copeland's son became very ill while visiting in London through the drinking of contaminated milk. Dr. Copeland became very wrathful. He addressed a small body of men in London shortly afterward, at which time he vehemently declared: "I don't care if you folks drink this kind of milk yourselves, but I should think you would have some decent milk to give visitors." To which they replied, recognizing the truth of the statement, "Would you tell that to Lord Astor?"

"I would tell it to the King himself," answered the Doctor. Immediately a conference was arranged with Lord Astor, who, together with Lady Astor, became so much interested in the subject that a commission was delegated to visit America for investigation of the latest methods of milk pasteurization and distribution.

This commission, after an exhaustive study which carried them all over the United States, wrote Mr. Horton as before quoted, and, as a result, Mr. G. E. Huling, chief engineer of the Sheffield Farms, was requested to serve and is now serving as consulting engineer to this English commission.

With the aid of the municipal health authority, Dr. Copeland; the father of milk pasteurization, Mr. Nathan Straus; and the pioneer wholesale distributor of thoroughly pasteurized milk, Mr. Loton Horton, the English metropolis may soon enjoy the same pure, germ-proof milk that the American metropolis has enjoyed for some time.

THE BOOK TABLE

AMERICAN PORTRAITS¹

BY LYMAN ABBOTT

THESE are portraits, not biographies. He who wants to know what these men *did* must go elsewhere for his information. He who wants to know what these men *were* will find in this book a perfectly frank and very luminous interpretation of their characters. The great portrait painters are never content with an accurate presentation of the features of the sitter. They study him while they talk with him, and aim to reproduce, not merely the house in which he dwells, but the man himself.

This was Mr. Bradford's aim in this interesting volume. He seeks to interpret the inner life of the sitter, and finds it difficult to do so. "Souls tremble and shift and fade under the touch. They elude and evade and mock you, fool you with false lights and perplex you with impenetrable shadows, till you are almost ready to give up in despair any effort to interpret them." To be a true portrait painter, whether with pen or brush, requires much more than skillful technique; it requires insight and courage—insight to perceive the real man behind the mask which consciously or unconsciously we all wear, and cour-

¹American Portraits (1875-1900). By Gamaliel Bradford. Illustrated. Houghton Mifflin Company, Boston. \$3.50.

age to report without fear or favor what one has seen.

To illustrate Mr. Bradford's insight, take this sentence interpreting the temperamental conservatism of Cleveland: "The Bible is good enough for me," he said; "just the old book under which I was brought up. I do not want notes, or criticism, or explanations about authorship or origin, or even cross-references. I do not need them nor understand them and they confuse me." It was that temperament that made him not merely a Democrat, but an "old-fashioned Democrat." He was almost impervious to new ideas.

To illustrate Mr. Bradford's courage, read his interpretation of Mark Twain: "His thought was bitter because it was shallow; it did not go deep enough to get the humble tolerance, the vast self-distrust that should go with a dissolving vision of the foundations of the individual universe. His writing alternates from the violence of unmeaning laughter to the harshness of satire that has no laughter in it."

One does not need to agree with all of Mr. Bradford's interpretations to welcome his volume as a luminous and courageous interpretation of eight of America's great, though not greatest, men.

have come to grief. The same paternalism, or maternalism, if you like so to call it, is exercised regarding incoming women colonists. Single women are selected on the other side of the Atlantic. They are brought out under care of a woman immigration officer and placed in the positions for which they are especially qualified—the great need in Canada, as elsewhere, being domestic help.

To the student of economics the book's value would be doubled had it an index.

MEXICAN MIND (THE). By Wallace Thompson. Little, Brown & Co., Boston. \$2.50.

Even more interesting than Mr. Thompson's previous volume on Mexico is his present work—a comparison of the mental processes and differences characterizing the Latin and Saxon peoples of the North American Continent. In addition, there is a running commentary on certain curious customs of Mexican life. No one of course will be surprised that Mr. Thompson's solution of Mexican problems is found in the education of the masses.

EDUCATIONAL

DICTIONARY OF ENGLISH PHRASES (A). By Albert M. Hyamson, F.R. Hist.S. E. P. Dutton & Co., New York. \$5.

A very useful book, which will be consulted frequently to verify or define familiar terms and phrases and will usually be found not wanting. More obsolescent and banal terms are included, however, than would seem to be desirable, and fewer of the newly coined ones that have obtained currency. "Big Bertha," "Jerry," and "World War" are significant omissions of this sort. Americanisms receive much more attention than in some other similar books of British origin.

HAUNTS OF LIFE (THE). By J. Arthur Thomson. Illustrated. Harcourt, Brace & Co., New York. \$2.50.

Professor Thomson describes in this book many strange forms of life that are found in out-of-the-way places—the seashore, the depths of the ocean, mountain heights and underground caves. But his book also has a wider scope. It is a commentary on the development of animal life in many forms—on land and sea and in the air; and it handles its entire subject in a way that will both fascinate and inform readers of all ages.

MISCELLANEOUS

COWBOY (THE). By Philip Ashton Rollins. Charles Scribner's Sons, New York. \$2.50.

A thorough study of one of the most interesting types of humanity that America has produced. The real cowboy is described here—a being somewhat different from the cowboy of the movies and the novels, but fully as interesting as pictorial or literary fiction has ever portrayed. The cowboy's character, habits, amusements, equipment, environment, and influence on the development of the West all receive exhaustive but always entertaining and discriminating treatment.

THE NEW BOOKS

FICTION

HERITAGE OF THE HILLS (THE). By Arthur Preston Hankins. Dodd, Mead & Co., New York. \$1.75.

Out of every half-dozen stories of mining mysteries and other Western "movie stuff" about one or two have something more than thrill and jump. This is one of the small minority. It is an original tale in its incidents, and it is also told with ability and graphic power.

MOON ROCK (THE). By Arthur J. Rees. Dodd, Mead & Co., New York. \$2.

Mr. Rees is a prolific and successful writer of mystery and crime stories. He has here built up his edifice of mystery with solicitous care, and puzzles his reader with his customary art. No one, however, need feel chagrined at not guessing the mystery; for this is one of a class of crime stories in which it is morally impossible to solve the problem, for the simple reason that a series of important facts which explain the cause of the crime are not known by the reader until after he has wasted a good deal of gray matter trying to guess what is unguessable.

UNCLE BIAH'S GHOST. By Jennette Lee. Charles Scribner's Sons, New York. \$1.50.

Did Uncle Biah really have a ghost, or an astral influence, or just a moral influence? The author does not seem to be quite certain herself, and the reader

is entitled to his own opinion. Mrs. Lee writes here, as in her other stories, with sharp presentation of individual traits and character and with brisk talk and action.

HISTORY AND POLITICAL ECONOMY

CANADA AT THE CROSS-ROADS. By Agnes C. Laut. The Macmillan Company, New York. \$2.50.

In this volume various reasons are given for the fact that Canada does not receive full profits from her national resources. Whatever Canada's present economic outlook, however, she has enacted some exemplary legislation of an economic nature—for example, the Industrial Disputes, the Soldiers' Settlement, and the Selective Immigration Acts. Of the last named, we read:

When the immigrant reaches the port of entry, he is not dumped in the nearest city. He is met by a government agent and guided to his destination. Is he a factory operative? To the factory and waiting job he goes. Is he a farmer—and it is the farmer for whom Canada particularly bids—he is put on the train and sent to the farm areas for which he has expressed a preference. At the farm destination he is again met by a government agent and again—if he so wishes—guided to his location. It is where colonists have resented this guidance and persisted in choosing poor locations that they