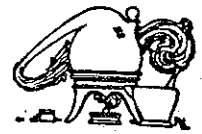


PILLS: AN AMERICAN STAPLE

By J. OLIVIER CURWOOD



THE pill and civilization walk hand in hand. Where the pill is, there, also, is civilized man. In fact, the pill is one of the marks of the highest development of mankind. If Americans may feel justly proud of being citizens of the greatest pill-eating nation on the globe, Detroit, capital of the State which bears the palm for predigested foods, deserves a second wreath of glory as the center of civilization, for she is the world's most prolific, tireless and versatile producer of pills. She sends forth these pellets of health at the rate of one hundred and sixty-six tons of pills a month—nearly two thousand tons a year! Little wonder that America bids fair to lead the world in civilization! It is a mark of the benevolent spirit of Detroit that, with this mighty wealth of pills made within her borders, she consumes but a small portion herself, sending the greater part to ease the ills of other places.

There is no malady on earth that Detroit pills will not alleviate. There are over seventeen hundred varieties of pills made in Detroit, and if pills to suit cannot be found among these, others will be cheerfully made to order. In the matter of pills Detroit aims to please.

If Detroit's crop of pills for a single year was made of any deadly poison one-half of them would be sufficient to depopulate the entire globe, but this would so injure the pill business that it is not likely to occur.

If the annual pill harvest of Detroit was strung on thread, like Christmas pop-corn, the rope of pills would reach twice around the earth, with enough over to tie in a bow knot. If this string of pills was cut in pieces each of the 36,000,000 women and girls in America could have a different necklace of pills for every day in the year, with an extra long one for each Sunday.

Detroit produces 4,000,000,000 pills each year, and yet this tremendous

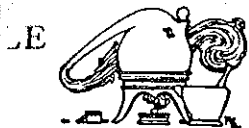
number is only about sixty per cent. of the total quantity of pills made, so that to get a fair idea of the growth of modern civilization and the pill-eating mania the sum must be multiplied by two or thereabouts.

To account for all of these pills would be a thankless task, but it is safe to say that not over one-third of them ever succeeds in getting out of America. This is not because we want a corner on civilization, but because just at present the home demand is about all that American pill manufacturers can attend to. The average consumption of pills in America is something like forty pills per capita each year. If you eat less than forty you are not doing your duty by the pill industry, and cannot be called a good American. In this estimate infants are included as pill eaters, for, from castoria to cod-liver oil there are very few things that escape the vigilance of the pill expert.

From an æsthetic point of view the pill does not yet rank in public opinion with the work of the lapidary and goldsmith, but this is only because the pill has been more largely advertised as a thing of utility than as an object of beauty. That the modern pill is beautiful no one who has visited a pill factory will deny.

In the large factories the pills pass through scores of hands which hunt for their imperfections. An unevenness on one side of a pill, so small that unskilled eyes would not detect it, condemns it. Doubtless it would go down all right with the unthinking pill public, but the pill artist takes pride in his work.

Sometimes the beauty of pills becomes almost dangerous. A few weeks ago in the "Pill City" an enterprising "proprietor" expended several thousand of dollars in sample boxes of pills, which he distributed on the doorsteps of something like fifty thousand homes.



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Just what these pills were intended for is not a matter of great moment—here. But they were very round, and very red, and very beautiful. And when applied to the tongue they gave evidence of being very palatable. A little kindergarten maid found this out, and immediately announced her discovery to others.

"They's throwin' candy on all the steps!" she confided joyfully.

Late that afternoon the teacher of the school became greatly perplexed. There was an air of sorrowful uneasiness among her tiny pupils. Suddenly she detected a very

small boy transferring something quickly from his trousers pocket to his mouth. She investigated, and after unearthing one of the pill boxes found, by questioning, that nearly all of her seventy pupils had been indulging in a repast of pills. One glance at the label on the box and the teacher flew to her desk. With lightning rapidity she scratched a single word on innumerable slips of paper, and gave each little piece of pill-eating humanity there one of them.

"Now, children, run right home!" she commanded. "Every one of you go to your mothers and tell them just what you have done and how many you have eaten. And be sure, every one of you, to give her your slip, and say the teacher said *that* was the kind of pills they were."

In the all-night work of the doctors which followed this pill escapade it developed that one youngster had successfully done away with three boxes, each containing twenty-five pills.

But taste and beauty is not all that a

pill requires. Like a pretty girl, to be really fascinating it must have a pretty name, a suggestive name. Of course there are hundreds of different kinds of pills which go on their merit alone, pills which large manufacturers put out under their own names. But there are scores of others, and they are becoming more and more common, which go out under names that make confirmed pill-eaters crave for them before they have ever seen them. The average pill-eater will choose "Golden Grains" to "Brown's Anti-dyspeptic Pills" nine times out of ten, and because of their

name, "Golden Grains," have become known all the world over. When a pale, languid woman passes a drug-store window and reads a sign therein which says, "Take Pink Pills for Pale People," it seems to be an especial message to her. "I will make you pink," say these pills, and what woman does not love to be pink? There is a tartness, a refreshing, straightforward candor expressed in the red letters which spell "Little Devils" on



Turning logs into pills. The first process in pill making.

hundreds of thousands of boxes of pills which are sold annually under that name.

Of course there is very little use in a pill's possessing an attractive name or being beautiful unless it is advertised. Oftentimes the advertising of one kind of pills for a single year costs upwards of a quarter of a million of dollars.

Thus far the chief market for pills has been in America, though their exportation is growing rapidly. This does not mean to imply that the limit of American pill-eaters has been reached. Apparently they have just begun to

take up the habit, for their appetite is improving at the rate of twenty per cent. each year. In other words there will be a fifth more pills eaten in the United States this year than last, and a fifth more next year than this.

And this phenomenal improvement has been brought about mainly by women. Correspondence with eighteen of the best known physicians in as many of the representative cities in the United States testifies to the fact that next to candy and beauty washes the average American woman's special weakness is pills! She takes them to

And yet this list is constantly growing. In Detroit each year sees at least two hundred new kinds added to it. Pill-discoverers are more numerous than inventors. Every medical college is full of them. Almost every physician at some time or other in his career makes a "discovery." He names it, has it made up by some manufacturer in a tempting form, and begins to advertise it. Sometimes he has it "done" in a rich red or a delicate pink. Or it may be jet black, old gold, brilliant yellow, or silvered. That is the way most pills come into existence. They are



The "mass-room" looks like a huge bakery. Here the pill "dough" of a thousand colors, tastes and smells is mixed.

grow fleshy, and she takes them to grow thin; she uses them to toughen her epidermis, and then she indulges in another course of pellets to whiten it; some will drive away freckles, and others are sworn to give her that healthy glow for fifty cents for which otherwise she would have to go to the seashore and pay two hundred dollars; there are pills for her appetite and pills for her nerves, brain pills and liver pills, and in Detroit alone nearly seventeen hundred other kinds, most of which at one time or another in her life she tries.



In the "noodle" machine the lumps of "dough" are whirled between two belts and come out in small pipes.

called "proprietary." The word "patent" has become old-fashioned.

But no matter who discovers the pills, or who makes them, the materials have to be secured. And for the things that go into these pills the whole world is scoured. The hunt for herbs and barks is as unceasing as that for gold, and is no less exciting. Savage lands are explored. The wildest jungles and waterless deserts are overcome in the search. The costliest of expeditions are formed that American pill-eaters may not starve, and all sorts of dangers and hardships

are encountered. Fishing fleets are chartered in the northern seas by great Detroit pharmaceutical institutions, and for several months in each year scour the ocean for fish that contain valuable oils.

In this search for new drugs, costly expeditions have been fitted out by pill-making firms which have penetrated some of the wildest and most impenetrable countries in the world.

A few years ago one house started out an expedition under the leadership of Dr. H. H. Rusby, a well-known botanist, on what has since been looked upon as one of the most daring enterprises of the last quarter of a century. The cost of this venture in the search for new materials for pharmaceutical purposes, all of which are now found in pills, was more than \$20,000. Landing at Arica, in Peru, Dr. Rusby journeyed to La Paz, where he made his headquarters for several months in the center of the great coca producing region, studying the therapeutic and physiologic action of that drug. Then he branched southward to Valparaiso, turned toward the Andes and crossed them, and then began preparations for one of the most hazardous journeys that could be taken in South America—the descent of three thousand miles of the Amazon in canoes and on rafts.

From that moment he completely disappeared from the world. For months no word of him came from the jungles and miasmatic swamps of that great river, and he was given up for dead. But Dr. Rusby was taking his time. Surrounded by poisonous serpents, dangerous animals, fever and disease, he analyzed every new botanical discovery he made. Accompanied by natives who could not understand his purpose, and who might prove treacherous at any moment, his nerve never failed him. And one day he discovered that drug which has made him famous, and which is now known as the greatest remedy in the world for a painful disease—Pichi. Since then that expenditure of \$20,000 has given a return of many times that sum.

At another time the representative of a Detroit pharmaceutical institution

landed at Buenos Ayres, and proceeded overland on horseback across the continent, a distance of over 3,000 miles. Reaching Chili, he proceeded with his investigations in the mountains. Many months after he had started out, and after a fortune had been spent, he discovered Chekan, which is now used by physicians the world over. Another expedition penetrated 2,500 miles up the Amazon, and in the wild, almost impenetrable jungles of the Madeira river discovered the drug Manaca, which now goes into millions of pills annually for the cure of rheumatism. Besides these, expeditions have explored the jungles of India and Africa. They have gone into the wild interior of Australia, and among the tropic islands of the southern seas. They have searched China and Japan, and other far away countries.

Once the materials are secured, it is only a step to the great pill manufactories in Detroit. In a great room that rumbles and thunders with machinery, where the air is filled with dust and whirling splinters, the second chapter in the story of the pill is begun. One would suppose that the business of this room was about as much related to the making of pills as a flour mill is to a brewery. Before one of the machines, which looks like a buzz-saw, stands a little blue-goggled man, with great leather gloves on his hands, and a log as big as himself in his arms. This log is precious sandal-wood from the jungles of far-away India, but the visitor does not guess it. He asks a question, and it seems innocent and proper enough.

"Is this the box factory—I mean where you make the lumber for your boxes?" he queries.

This is never intended for a joke, but the thin, consumptive-looking man at the machine has grown emaciated and old in answering it. He sees no humor in this eternal grinding up of logs for pills at eight dollars a week, and he opens his mouth just once to deliver the information, and then in a shrill, penetrating voice of defiance it comes in a single word—Pills!

In the logs that this man grinds up day after day is the Santal oil which is

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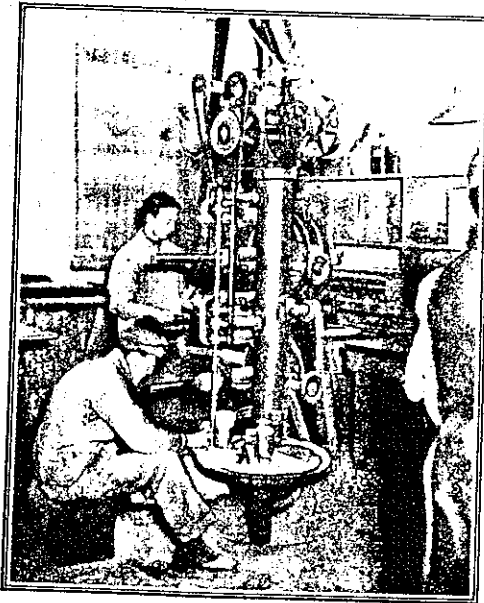
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extracted by distilling. Then with other medicaments, which have been secured from various things in various ways, it is ready for mixing up into "dope."

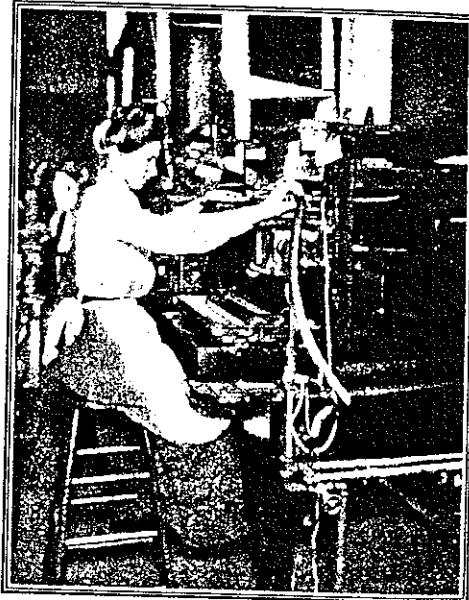
In the "mass-room" the pill dough begins to take form. Here again one might suppose, if he did not know that he was in a pill factory, that he had run amuck of a bakery that worked on a pretty big scale. There are dozens of rollers with men at them mixing all sorts of colored stuffs. One mess looks like delicious gingerbread almost ready for the oven. Another might be angel-

girls whose work is suggestive enough to delight the hearts of young men seeking wives. A little pat here and a little pat there, and these pill biscuits are ready for the dainty hands that feed them into the "noodle" machines, or for those men who dump them into giant pill machines that turn out 2,000,000 pills each day.

When they go through the "noodle" machine the lumps of dough are whirled between two belts moving in opposite directions and come out at the other end in small, perfectly round "pipes." These go to the scores of girls who are



One of the giant machines which turns out 2,000,000 pills a day.



Bushels of pills receive "skins" of gelatine from these machines.

cake. But the most of it would be rye bread, if a guess were taken, varicolored and ready for the tins. But these hallucinations would disappear instantly unless one's nose was stuffed with cotton. The odors are suffocating. In a minute or two a thousand particles, each with a taste of its own, seems to fly into one's mouth.

A facetiously inclined person once called the room into which the pill dough is sent the "biscuit and noodle department," and certainly the christening was appropriate. In this room the dough is seized upon by scores of pretty

making pills by hand. But hundreds of bushels of the "biscuits" are sent direct to the great pill machines. At the very top of each of these machines, so high up that the man who feeds it is compelled to stand on a platform, these pieces of pill dough are fed in. As one of the biscuits falls it is shuffled between two belts until it is in the form of a pipe, when it slips down a chute to a cutter run by the middle wheel of the machine, where it is clipped into even lengths and the pills moulded into shape at the same time.

In every pill manufactory there is a

place filled with the most absolute mystery until one is allowed to visit it. As one approaches it strange sounds begin to fill the air. They become louder and louder and finally deafening. There is almost a belief that an army of merry-makers are somewhere about rattling stones in the bottoms of innumerable tin pans. Your guide smiles—then yells. He has to shout in order to be heard when in the neighborhood of this place.

"That noise is made by ten million pills!" he launches at you in stentorian voice.

Up a couple of steps and through a door—what a pandemonium of thunderous rattle and clatter! A score of huge copper pans stretch out in a long row, whirling and whirling with dizzying regularity, and each sending out a deafening tumult of sound.

"This is where we coat 'em!" yells the guide. "Ever see pills coated with gold or silver?"

In one pan this interesting process is always going on. Perhaps the individual pills are already beginning

to take a golden hue. Then the eye catches the glint of something whirling about in the tossing mass—pieces of torn and crumpled gold-leaf.

"You see," shouts the guide, putting his hand to his mouth, "we put the leaf in an' the pills pound and roll on it until they become colored with gold—not enough to make it so awfully expensive. We do the same with silver-leaf. There's no reason for it, except that some fashionable people won't take pills unless they're covered with that stuff!"

Here is illustrated to the very ex-

treme the "fashion" in pills. Millions upon millions of gold and silver covered pills are made each year. On the other hand, pills are often given a gold and silver coat by manufacturers in order that they may bear some distinction over the great mass of pills and be more readily recognizable by their patrons.

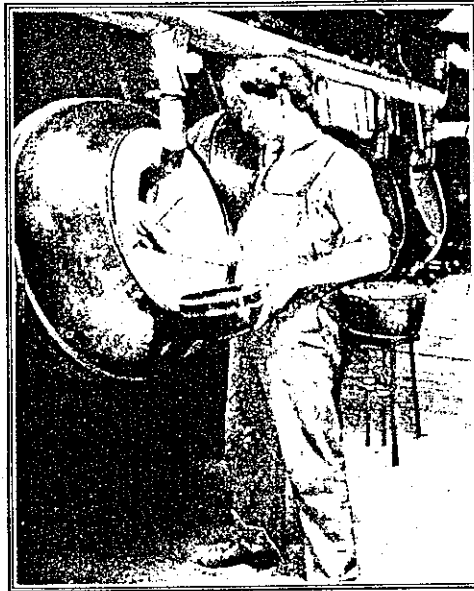
At other pans in this great room are bare-armed men with ladles and crocks in their hands, giving millions of pills the more plebeian dress of colored syrups. Every few minutes these men pour a ladleful of syrup over the whirling pills. Unnumbered

thousands of these dance and tumble against one another and up the shining sides of the copper pans, distributing the syrup so evenly over themselves that when they are done no one is more heavily coated than its companion.

But there are millions and millions of pills which are not coated with sugar or gold or silver, but whose "skins" are made of gelatine. Each operator has a hol-

low bar, to one end of which is attached a flexible tube through which the air is being continually exhausted from the bar. On this bar are several rows of tiny openings, and on these are placed the pills, which are held there by suction while they are dipped into a hot gelatine bath. Then the pills are allowed to cool, are then reversed, and their other half coated.

Thus for three hundred and sixty days in the year, and sometimes nights as well, thousands of men, women and girls manufacture food for the constantly increasing army of American pill-eaters.



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