

Women as Inventors



Drawing by Ray Walters

By ELMO SCOTT WATSON

THE other day an Illinois woman was granted a patent by the United States patent office for a "secret envelope," i. e. one which cannot be steamed open, its contents read and be sealed without detection of the fact that it has been tampered with. Immediately there were columns of newspaper publicity about the "woman inventor," as though woman in that role is unique.

To the average person she is, perhaps, for we commonly think of the inventive genius of woman in terms of the stock joke about her ability to do an innumerable number of things with a hairpin when necessity demands it. As a matter of fact, women inventors are becoming more numerous every year, as the records of the United States patent office will show. The women's bureau of the United States Department of Labor recently made an analysis of those records to determine woman's part in this age of invention and revealed what will be an astonishing fact to many persons—that at least 500 government patents a year are now granted to women inventors, and that more patents were granted to them in a recent ten-year period than were issued during the whole century ending in 1845.

Although the number of patents taken out by men is some 70 times as many as the number taken out by the other sex, the percentage increase for women from decade to decade has exceeded that of the men by as much as 300 per cent in some years. Another striking fact is that war seems to be a strong incentive to woman's producing new things. Before the Civil war about half a dozen patents a year were granted to women. During the war and in the years that followed the number of patents to women increased steadily, rising at times to more than 100 annually. The decade of 1857 to 1867 saw an increase of 677 per cent in the number of articles patented by women, as compared to 290 per cent increase for the men in the same period.

Although it is yet too early to predict what effect in this regard the World war will have, it is true that the number of patents taken out by women from 1918 to 1921 was 34 per cent higher than from 1912 to 1918.

Even at that, the pre-World war period was one of great activity for women inventors, for in that time more than 5,000 patents were granted to women in ten selected years from 1905 to 1921, a number which far exceeds the total number granted them during the span of 105 years which ended in 1895.

As might be expected the majority of women's inventions are those which have to do with their household duties. But they are far from being limited to that and they cover a wide range of activity in 50 industries, coal mining through agricultural machinery, hospital equipment, manufacturing equipment, chemicals, artificial fuels, wood turning, even to submarine explosives! Before you exclaim over that last, however, consider a list of inventions by women which proves that the mothers of men, who are proverbially opposed to the war which robs them of their husbands and sons, are still doing their part to perpetuate its horrors. This list includes automatic pistols, bomb-launching apparatus, a cane gun, an incendiary ball, railway torpedoes, sights for guns, submarine mines and a top for powder cans.

Woman, the citizen, is responsible for inventions of voting booths, voting machines and of pocket ballot. Woman, the scientist, has given us new dyes and new dye bases, chemical treatment of oils for commercial purposes, artificial fuels, gas apparatus, air compressors, hoisting apparatus, reversible turbines, various steam and street railway necessities ranging from road bed and rails through rolling stock equipment to traffic signals and block systems.

Some of the reasons given by the women for their inventions are among the most interesting facts connected with their work. A large number of these reasons, of course, come under the proverbial head of "necessity, the mother of invention." One invention, made for this reason, turned its benefits in a direction curiously different from the original intention. A woman golf teacher, who had been much annoyed by the perverse habit of golf balls of becoming lodged in inaccessible places or dropping into streams, invented an adjustable rake to recover the errant balls. The wider usefulness of the rake was soon apparent, and gardeners now have a golf teacher to thank for making their work lighter.

ent for an improvement on a cultivator tongue, which lightened the burden of the "menfolks," said that "having been raised on a farm and seeing that there was needed improvement on cultivator tongues, I made up my mind to improve upon the old-style ones." A Minnesota woman invented a portable smoke house because as she explained it "As a farmer's wife, my duty was to cure meats for summer use and smoked meat is very much favored in my family. I tried to smoke mine without expense, and after I had completed this device I used it successfully for two years before I obtained a patent upon it."

It is in lightening her home duties that the American housewife finds her best reason for turning to invention. In this realm her new devices include alarms for cooking utensils, juice extractors, kettle protectors, sieve-cleaning devices, waffle irons, ash cans, laundry equipment, broom racks, stovepipe cleaners, napkin holders, bed-airing devices, high chairs, bathroom fixtures, an automatic rocking chair fan, awnings, clothes containers and ant traps. Domestic difficulties sometimes result in invention, as witness the case of the woman who invented a pie-pan cover because of the "overflowing of juicy pies, the best of the pie is wasted, leaving the poorest part in the crust."

And these are only a few of the many new devices for which the world can thank the women. None of them is "revolutionary," perhaps, but for those whom they benefit by making life easier, that is immaterial. What if, so far, mere man has been responsible for all of the most important inventions, including those, such as the typewriter and the sewing machine, which have meant so much to women? (Incidentally, it might be added that Elias Howe's invention of the sewing machine was not greeted with unanimous enthusiasm by the women of the time. Was it "feminine inconsistency" which prompted some of them to opposition when the first sewing machines came upon the market because they "would take away the livelihood of the poor sewing women"?) This increase in woman's inventive activity, as shown by the records of the patent office, may be indicative of the increasing importance of women in every phase of life, and we may yet see some new device of world-wide and all-time significance conceived in a woman's mind and molded by a woman's hand.

A Texas woman who took out a pat-

Albert Rooke Makes His Comeback

Wins six-year fight for health. Now well and strong at 60. Husky as ever, he praises Tanlac

At 1830 West 39th Place, Los Angeles, lives Albert A. Rooke, a respected citizen with 38 years of active railroad experience. He tells of a very interesting experience.

"About seven years ago," says Mr. Rooke, "my stomach and liver went back on me. It was a most distressing experience. Nothing seemed to agree with me; I lost all desire for food. A sound night's sleep was out of the question, so I rose each morning tired and peevish. Then constipation developed and made life a continuous misery. I lost weight and could hardly drag myself around a good deal of the time. After six years of that I was all in. Along came the 'flu' when I had no resistance left. That was about the last straw. Nothing seemed to help me."

"On a friend's advice I tried Tanlac, and that certainly did help. I soon began to get refreshing sleep again, to eat with old-time zest. The distressing stomach and liver troubles disappeared. Briefly, Tanlac put me on my feet, with all my old-time vigor and enjoyment of life. I put on weight and after five bottles was as well as



ever in my life. That was a year ago. I'm still in fine shape, as you see. Few men of 60 are as well as I am, thanks to Tanlac."

Tanlac is nature's own tonic and body builder, made from roots, herbs and barks by the famous Tanlac formula. Try a bottle—it may do for you what it did for Mr. Rooke. Your druggist has it. Over 52 million bottles sold.

A Spellbinder

"Do you admire Wagner's music?" "I do," answered Senator Sorghum. "He's a true spellbinder. I know of no other man who could compel people to listen so attentively, regardless of what was being said."

Clever people may suffer immensely; only one in ten may understand their cleverness.

His Intention

"Gap, you ort to get for the smaller children some sort of toys that can't break up," said Mrs. Johnson.

"Um-huh!" replied Gap Johnson of Rumpus Ridge. "I sorter 'lowed to go around to the junkyard next time I'm in town, and see if I can't find a few second-hand anvils for 'em. What do you think of the idy?"—Kansas City Star.

Children Cry for

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To avoid imitations, always look for the signature of *Chas. H. Fletcher* Proven directions on each package. Physicians everywhere recommend it.

Mounted on Moving Throne

Following actors around in a studio setting has had its difficulties for directors during the filming of plays. One producer in California has reduced these difficulties by using a little truck propelled by batteries. It has a platform and is accompanied by a camera man. On his odd eminence he can trundle back and forth and maintain perfect contact with the work his company is doing.

Keep Out

Mrs. Gale—Our new neighbors were quarreling over a new vacuum cleaner this morning.
Mr. Gale—Well, be careful, and don't get drawn into it!—Good Hardware.

Eye infection and inflammation are healed overnight by using Roman Eye Balsam. Ask your druggist for 25-cent jar or send to 372 Pearl St., N. Y. Adv.

Never Could

"I cannot sing the old songs."
"So your grandmother told me."—Pittsburgh Chronicle-Telegraph.

A Spanish vessel, laden with oils, that caught fire in New York burned 50 days before firemen finally conquered the flames.

Huh?

"Who is that?"
"The hog-calling champion."
"Has he much of a following?"

Some overwork thought.

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