

Do You Know?

Caraway seed is now being grown in this country as a result of the war.

No *air-conditioned* railroad equipment is in use in Brazil on its 21,000 miles of railways.

The *mechanization* of agriculture is one of the prime objectives in Chile's new development program.

Because of its alkaline reaction and gaseous nature, *ammonia gas* was called "volatile alkali" by earlier chemists.

A new *electric gauge* is in use that will detect errors in thread gauges and threatened parts as small as twelve millionths of an inch.

Some colleges of pharmacy give prospective druggists courses in *cosmetics*, including their manufacture and action in use.

Fossil remains of a giant *flamingo*, larger than any flamingo ever known before, has been found in a quarry in South Dakota; the tropics and semitropics are the usual home of this bird.

Hungary has found the cultivation of *sunflower seed* for table oil to be more successful than the cultivation of other oil-producing plants and is constantly increasing the acreage.

Rosin combined with a non-drying or slow-drying oil, such as untreated soybean oil, is used as a soil-binder for quick road building in a method recently patented.

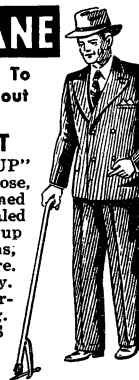
NEW "PICK-UP" CANE

Permits Cripples and Invalids To Pick Up Small Articles Without Painful Stooping.

NO OTHER CANE LIKE IT

Now . . . in the MASON "PICK-UP" CANE we offer a double purpose, light weight cane specially designed for cripples and invalids. Concealed mechanism permits easy picking up of papers, pencils, cards, coins, etc., with simple finger pressure. No painful stooping necessary. Exceptional balance with rubber-tipped base insures safer walking. Beautifully finished. 5-DAYS TRIAL—Write for FREE Circular and 5-days' trial offer. Use the Mason "Pick-Up" Cane yourself or as a perfect gift for a friend.

W. H. MASON Box 27 Leesburg, Ohio



ACCOUNTING

Ticket Printing Machine

After the war, your railroad ticket will be printed while you wait. This will eliminate the need for large stocks of pre-printed tickets.

➤ BUYING a railroad ticket after the war will be as fast and simple as buying a ticket to a movie theater today, thanks to a new machine that prints railroad tickets instantaneously, eliminating the necessity for maintaining a stock of tickets printed for various destinations on the same railroad.

The ticket printing machine is just one of five new inventions already perfected to make rail travel faster and cheaper, Edward H. Bunnell, vice-president of the Association of American Railroads reported.

The new machines are referred to by Mr. Bunnell as "new accounting controls of railroad revenues and costs." They are now being tried out by several railroads, and it is expected that they will be used widely as soon as the war is over, and materials for their manufacture are again available.

The machine for railroad ticket offices which prints card tickets as they are needed looks like a small cash register. It is primarily designed for local or point-to-point tickets, such as from Washington, D. C., to New York City or from St. Louis to Kansas City. Up to 100 different railroad stops can be printed by one machine. No provision has been made, as yet, for the indicating of intermediate stops on the ticket. Tickets good in coach or Pullman may be printed on the same machine.

The tickets themselves are approximately two inches square. At the same time that it prints the ticket, the machine does the serious bookkeeping for the railroad company. So complete is the bookkeeping job done by the machine that the ticket seller has no records to make up at the close of business for the company. The cost of printing 1,000 tickets, including paper, is less than 20 cents.

For longer tickets, such as those purchased for travel between New York and Los Angeles, where several railroads are involved, a second machine has been developed. Known as a ticket accounting machine, it uses long strip coupon tickets that have already been printed, and it prints in triplicate the amount of the fare, government tax, and the total amount of the ticket.

The third new device is a dining car register that will tabulate the details on meals in one-tenth the time required to do it now by hand, and will give the passenger a receipt for his meal.

The fourth device is a payroll machine that mechanically computes earnings and deductions, then prints them separately and as a total on the payroll check.

The fifth device combines the use of teletypewriters, like those used to transmit telegrams and news bulletins, and card-punching equipment. The combination makes it possible for the freight terminal at which the train is made up to make up a master punched card on each car in the train, containing information as to its contents, destination, instructions for handling perishables and so on. With the teletypewriter-card punch unit, the punched cards are reproduced instantaneously at any other terminal along the line through which the train will pass.

This information is duplicated by the machine on punched cards at the receiving terminal before the incoming train arrives, so that when the train chugs in, the yard forces are ready to handle it speedily.

Science News Letter, October 28, 1944

MILITARY SCIENCE

Nazis Instruct Civilians In Use of Gas Mask

➤ GERMAN authorities recently instructed the citizens of Essen, industrial city not far from the West Wall, in the proper care of gas masks. New gas masks were distributed to different age groups, including babies.

These facts are reported (*Flight*, Sept. 14), the official organ of the Royal Aero Club. The instructions, published in an Essen newspaper, seem to indicate an increased interest in gas warfare on the part of the Nazis.

The instructions warned the people not to keep gas masks in damp places, since they may become clogged. They were told to keep them in a dry place, but not in storage closets containing anti-moth powder or moth balls.

Science News Letter, October 28, 1944