

## **ROBOT RETAILING**

Traveling along today's modern highways, a motorist can hardly fail to notice the growing number of vending machines installed for his convenience at such places as service stations, restaurants or motels. Machines dispensing refreshments or cigarettes are old acquaintances, of course. But lately their ranks have been joined by numerous other coin-operated vending devices competing for the motorists' dimes and quarters. Ready for service at all hours, they offer a wide variety of merchandise ranging from books and magazines to toys (for children or dogs), toiletries and crushed ice, most of which were formerly available only during regular store hours and at the expense of a detour through an urban business district.

This innovation catering to the needs of hurried travelers is, of course, merely one special phase of a general trend toward unattended or "robot" retailing which, as trade sources point out, is the logical continuation of self-service in retailing. Last year, the robots took in nearly \$3 billion in small change.

Coin-operated vending devices have been around for a long time. They appeared first in Europe more than a hundred years ago but did not make much headway against the then prevailing methods of retail selling. In our own country the earliest vending machines date back to the end of the last century. They were for

the most part simple little gadgets which dispensed a limited variety of offerings, such as candy, nuts or gum, upon insertion of a penny or nickel and a tug at a spring-loaded lever. Railroad stations and similar places of heavy pedestrian traffic were their most frequent habitat.

Today's coin-operated vending machines are vastly more sophisticated in design and more versatile in application than the earlier models and have found many new locations for plying their trade. They bear witness to the industry's improved know-how as to temperature control, packaging and sanitary handling. Improved change-making devices have broadened the price range of items that can be handled by machines and thereby have opened up new fields of application for this method of selling. Greeting cards and corsages, phonograph records and school supplies are among the many non-food items sold through machines. Other coin-fed gadgets will write flight insurance policies, play the latest popular tunes, take passport pictures or sell parking space for our cars. Almost side by side we may find machines that, for a handful of quarters, will tumble our clothes in laundry or dry cleaning drums for an hour and others that, for a more modest fee, will give our small fry a few minutes' illusion of riding on a jet plane or a bucking bronco.

Food and beverage items are still the mainstay of the vending industry, but all fields of retailing are its ultimate goal. In some large apartment buildings such daily necessities as bread and milk can be bought from coinoperated dispensers. Some of the most modern apartment houses offer their tenants the convenience of buying the frozen ingredients for a complete meal right on the premises, from machines which usually are installed alongside the coin-operated laundry equipment and which may respond to coins or to a credit card.

The vending industry is following two lines in expanding its activities. One is to place its wares within the most convenient reach of consumers, in old or new locations where demand for particular items is anticipated. This tends to compete with sales of the same items by conventional retail outlets. Most of the industry's efforts so far have been in this area of the "convenience" items.

The industry's second aim is to convert existing retail facilities to completely unattended vending procedures in order to bring about the greater efficiency and lower operating costs which are claimed for robot retailing as compared with conventional selling methods. This aspect is still in an experimental stage. A few grocery or variety stores without any sales personnel or floor attendants have been launched to test the claims, but at least one of the test stores in the grocery line has been discontinued because of disappointing sales. One store handling merchandise unsuitable for machine vending is operated by an electronic system with punched cards, matched against numbered merchandise samples, to serve for filling the orders from stock and preparing the sales tickets. For the customer this is quite similar to a mail order or catalog purchase.

Public acceptance of machines selling readyto-eat food and refreshments has been quite favorable. Dispensers of snacks in solid or liquid form, of course, are an unqualified success both as to meeting a public demand and yielding a profitable return. Some people wonder, in fact, whether the installation of coffee machines has created or merely solidified the coffee break as an American business tradition.

The response to vended meals seems to be divided, being most favorable with "captive" customers, i.e., those in factories or offices with no other eating facilities in the neighborhood. When competing with restaurants or conventional cafeterias close by, the machines rate second with many patrons. Disillusioned operators ascribe this to the missing personal touch and are falling back upon human hostesses who are able to greet customers with a smile, say "Thank you" and correct the occasional disobedience of the robots.

The obsolescence of attended retail selling appears to be less imminent than some advocates of robot retailing would have it, even with an expected doubling in the volume of unattended sales over the next few years. Last year's total of such sales amounted to less than 2 percent of all retail sales of non-durable goods.

A large-scale shift to robot retailing--aside from making our present shortage of coins more acute--would affect retail employment by reducing the number of sales employees and increasing the number of people needed for restocking and servicing the machines, with a possible net loss over all. Such a development could result in removing retail trade from the list of "growth" industries in terms of employment--those which in recent years have been able to absorb more than their share of the expanding labor force. During the past few years the rate of employment increase in retail sales has been lower than it had been ten years ago. That deceleration reflects a general spread of the prevailing self-service methods rather than a conversion to completely unattended retailing.