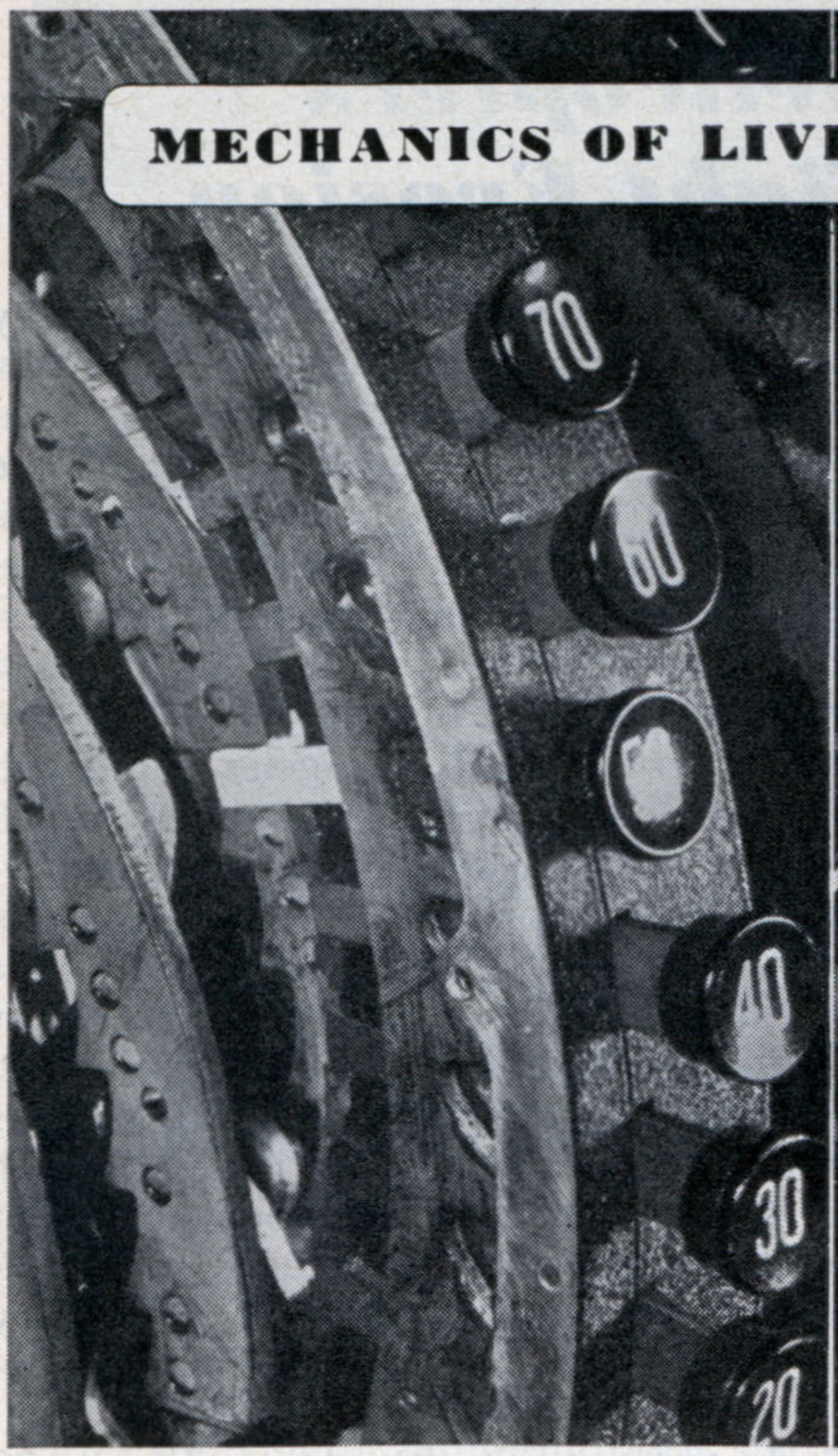
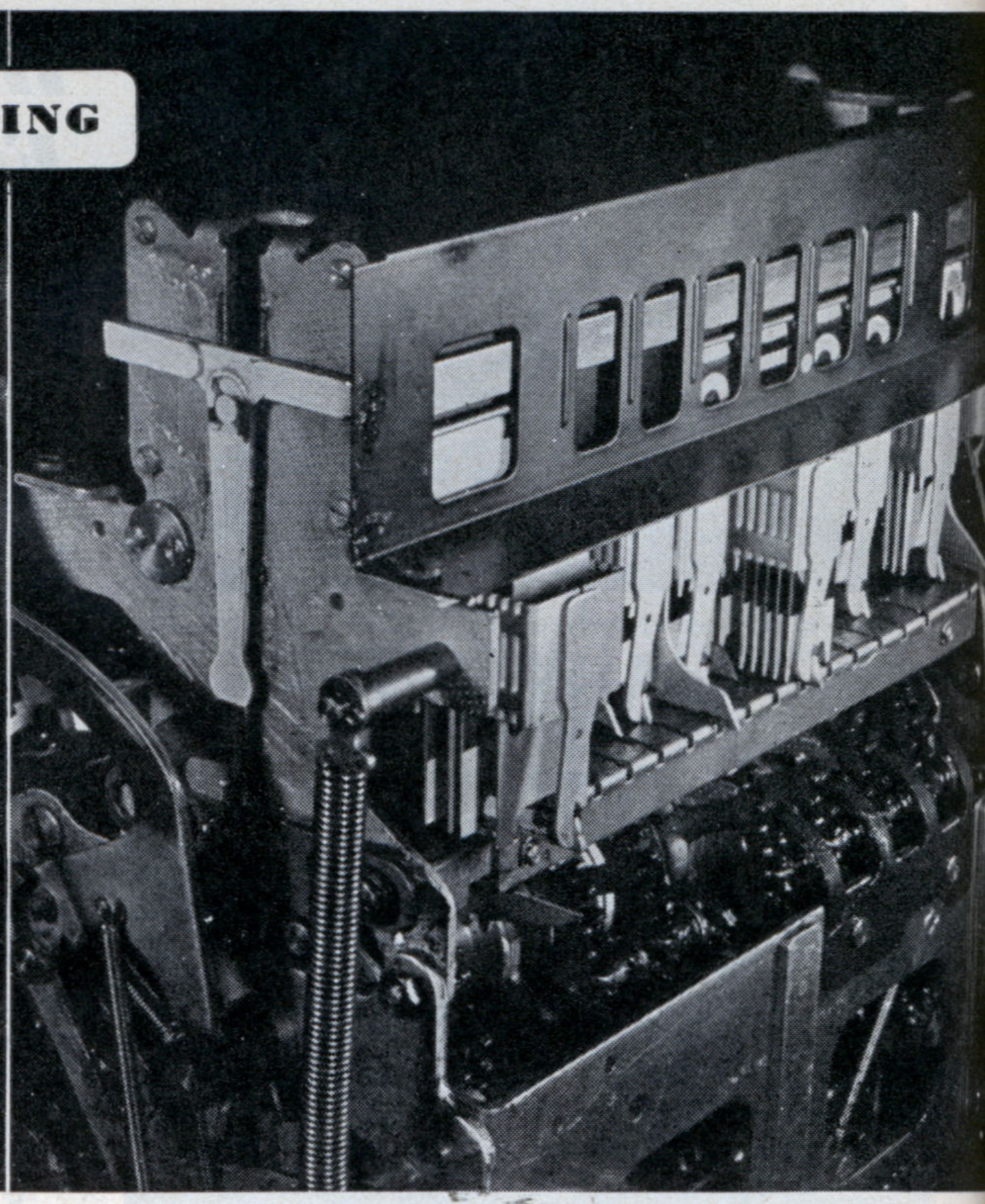




Punching a cash register key sends a stem down to stop a gear wheel in the proper position. The gears move from the zero setting when the operating bar is pressed. In this picture, key stem and corresponding gear tooth are painted white and the key bank partly removed.

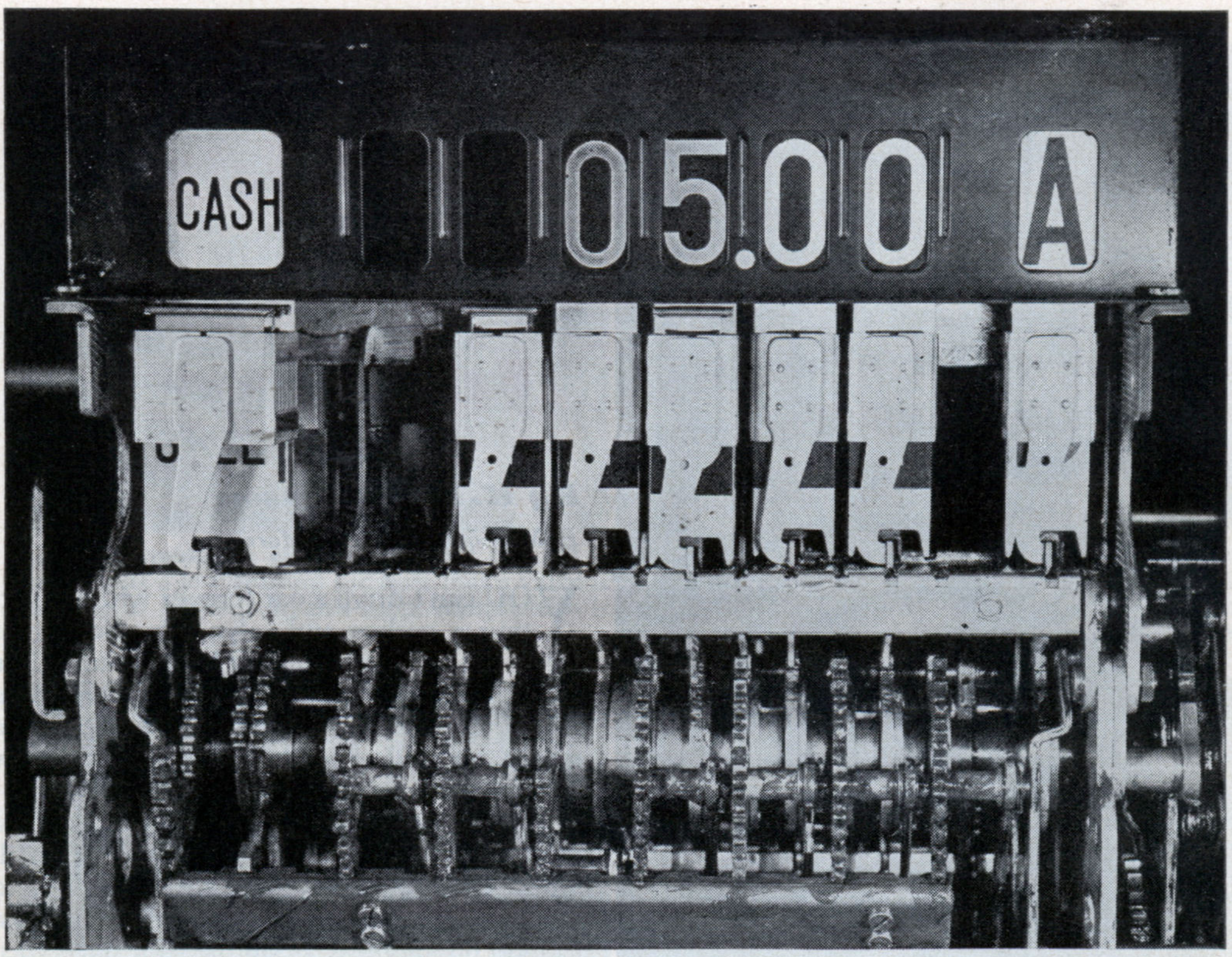
The gears move boxes holding indicator cards a distance that depends on the key punched, positioning proper cards under fingers on a rising bar (left, painted white). Fingers pick cards from boxes and lift them to windows. Notice "5" moving into view in window at top.

How a Cash Register Works

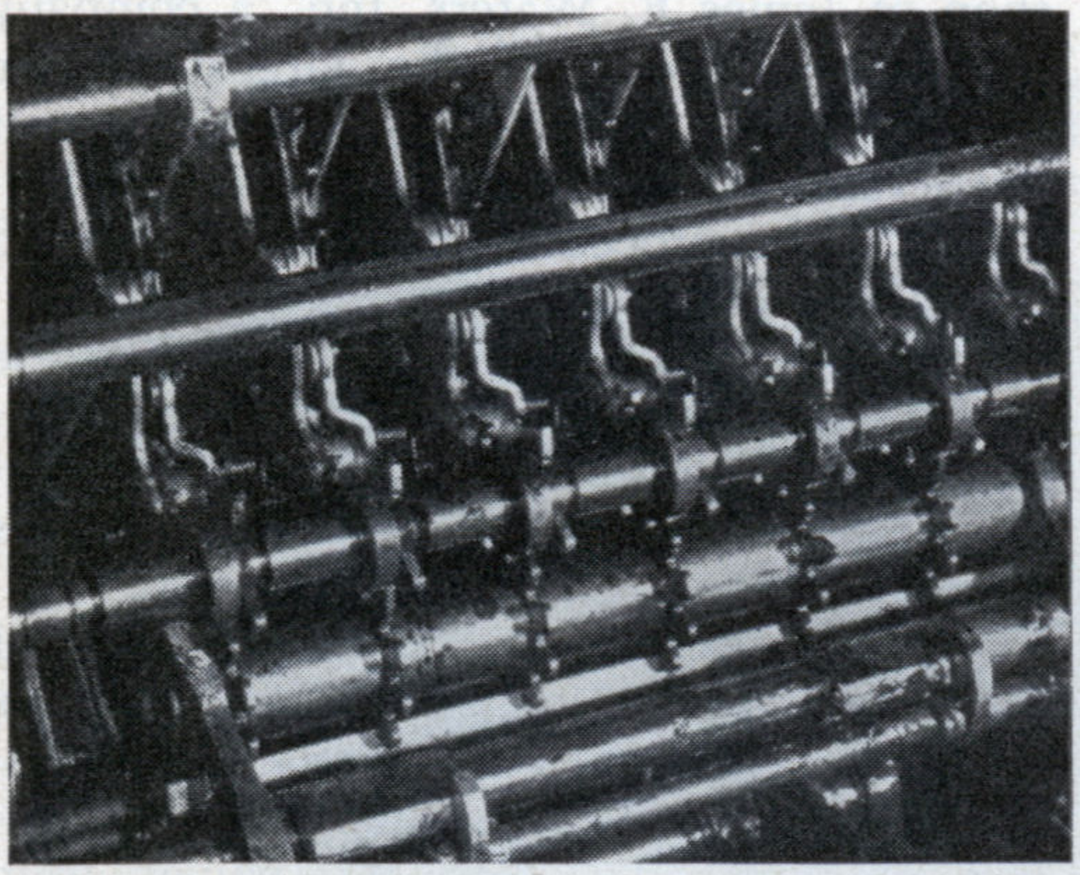
CASH registers have come a long way since James Ritty built the first one in 1879. His invention was simply a register and nothing else—the keys moved hands on a clocklike dial to indicate the amount of a sale. Now the modern machines do practically everything but tie up the package.

Some of the bigger models used in department stores have six cash drawers, a separate one for each of six clerks. Dials tell the manager how much each clerk has sold and how many sales he has made. Other dials keep track of payments made on credit accounts and petty cash paid out.

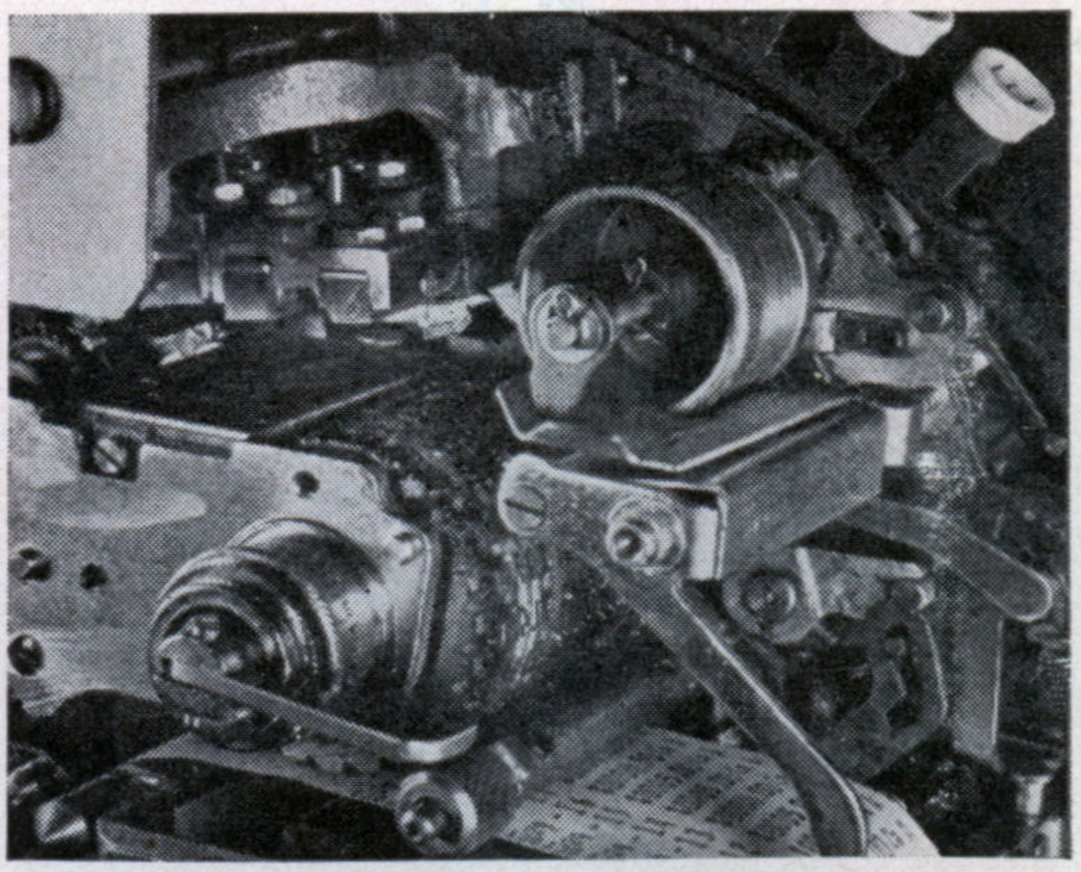
The National Cash Register Co.'s model shown in the photographs, a standard one used in many kinds of businesses, has one cash drawer and dials that count sales and total amounts. It prints a sales record, gives a receipt, and stamps the sales slip.



When all the gears and moving arms have finished their operations, the register shows a $5.00 sale. The center box shifted out to the "5" position while the other numeral boxes stayed at zero. The box at far left moved to locate the card indicating the transaction (cash) and the box at far right gave a card identifying the clerk. Actual movement of the indicator boxes is accomplished by the gears at bottom, which are connected to the gear wheels in the front of the register (shown in photo on other page). A small electric motor furnishes power.



The gear train shown above transmits information set up on the keys to the dials that tell how much money was taken in and paid out, and how many sales were made. This part of a cash register is essentially a standard mechanical adding machine. The merchant can also secure a printed record of the total day's business from some types of registers by pressing special keys when he checks up at closing time.



The printing part of this cash register makes a tape record of each sale (listing date, sale number, amount, type of transaction, and clerk), stamps the sales check, and turns out a separate receipt. The tape record can be seen at the bottom right of the picture and the printing wheel at lower center. This wheel has two sets of numbers to print record and receipt at once. Sales slip is then moved to stamping position.