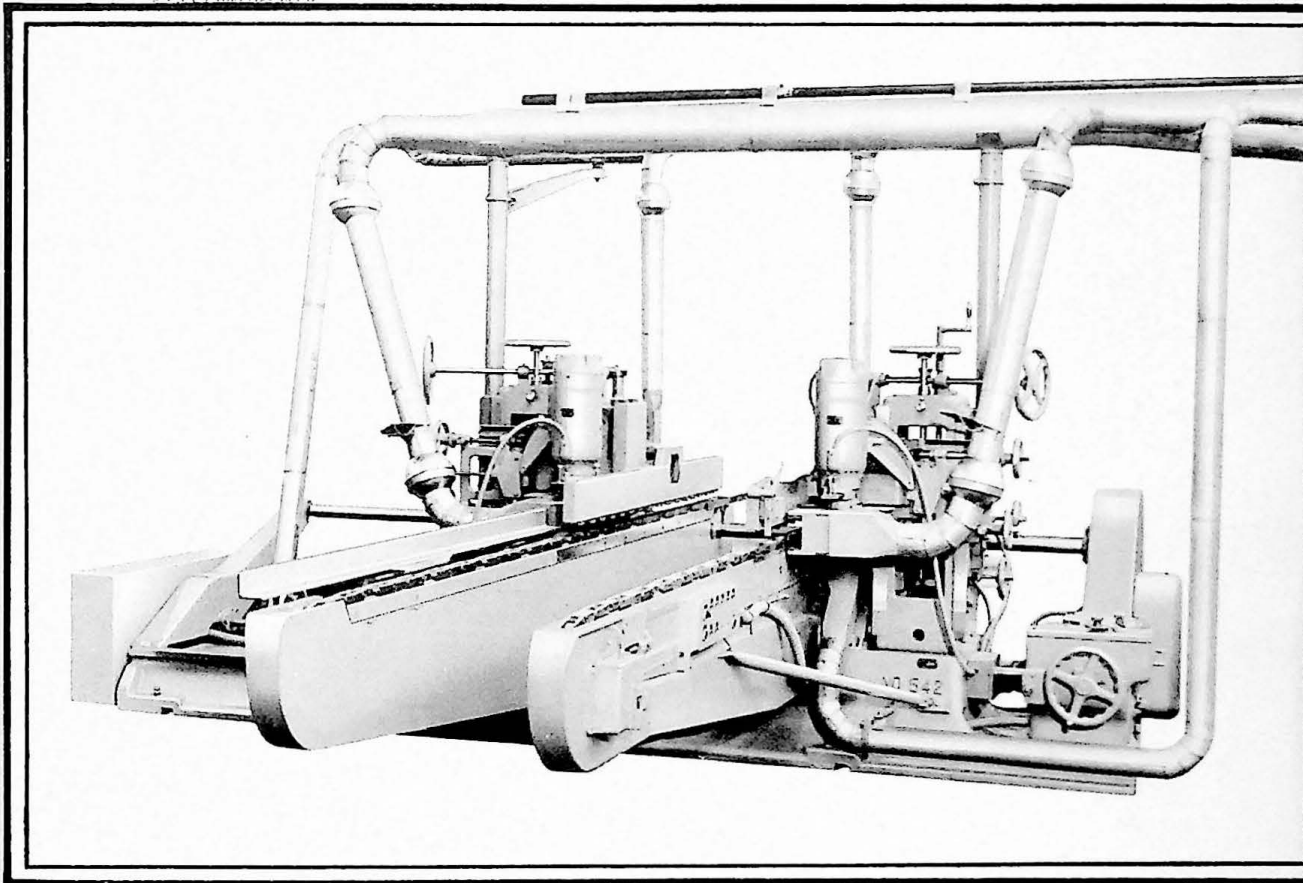


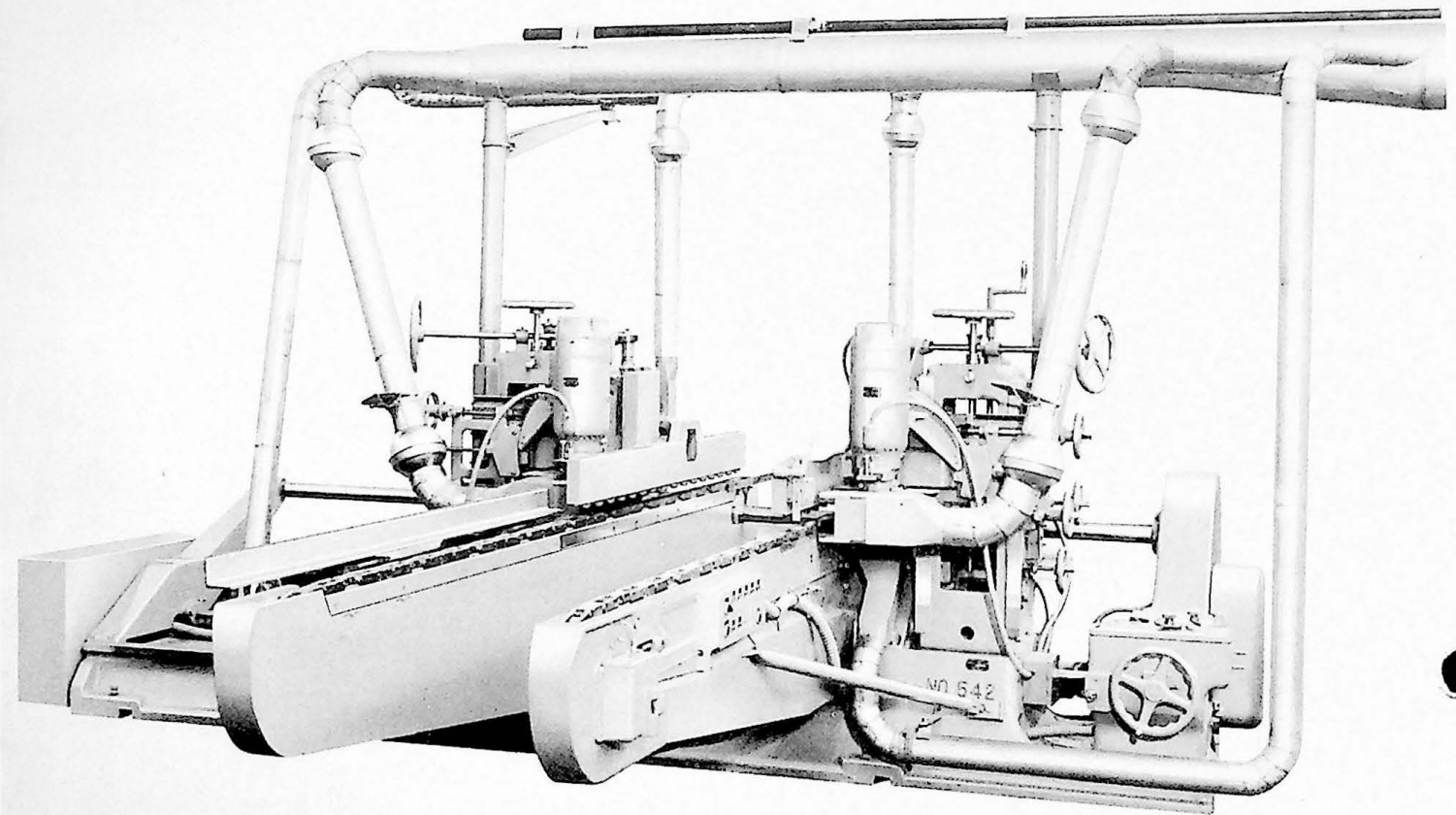
MACHINERY & TOOLS
GREENLEE NO. 542

DOUBLE-END MACHINES



FOR ACCURATE
HIGH-SPEED SIZING
OF FLUSH DOORS

GREENLEE BROS. & CO., ROCKFORD, ILLINOIS, U.S.A.



Due to its many exclusive features, the Greenlee No. 542 Double-End Machine is particularly well suited for accurate and economical sizing of flush doors. Such work is usually done with vertical top cope units for jointing the long sides followed by easing units for rounding or beveling the sharp edges of the door.

Production in excess of 2500 doors per 8-hour day can easily be realized by using one No. 542 for jointing to width, and another for sawing to length. This can be achieved

with either manual handling or with fully automatic transfer equipment between the two machines.

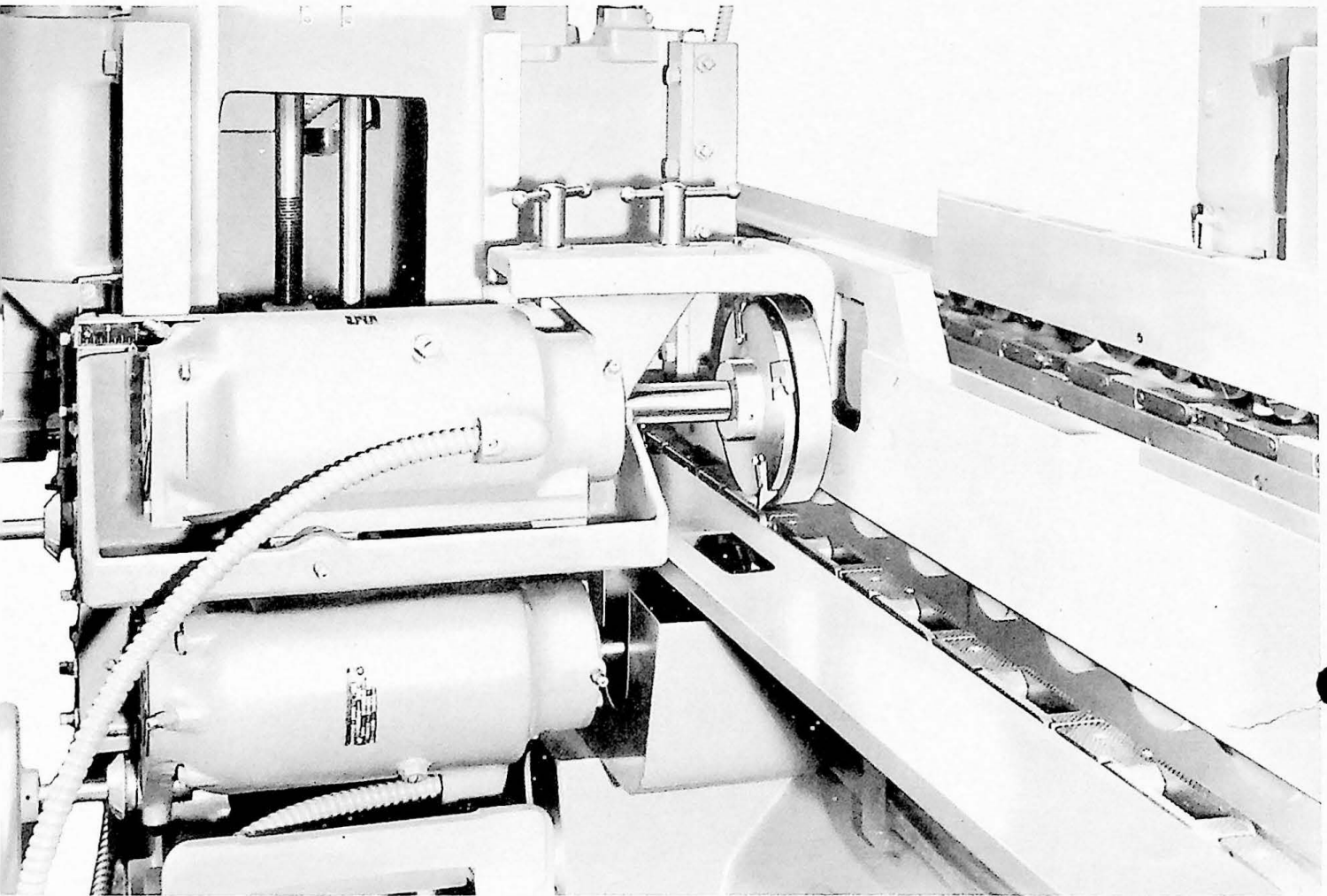
During the jointing operation, which is handled on a machine as shown above, corrugated feed chains and rubber roller-type hold-down beams greatly reduce friction, permit easy feeding and hold the work securely for smooth accurate cutting. V-tracks, machined of laminated material, eliminate the lubrication and wear problem.



The front units are normally provided with an easily set 90-degree tilting adjustment. With this arrangement they may be used in a horizontal position for sawing or in a vertical position, as shown, for jointing. Jointing heads, usually furnished with carbide-tipped knives, leave exceptionally smooth cuts. Heads of this type also reduces to shavings all overhanging veneers, crossbands, and offal from the core.

Dust hoods and the overhead exhaust piping as shown on the preceding page are designed especially for each machine. They provide efficient chip and dust removal.

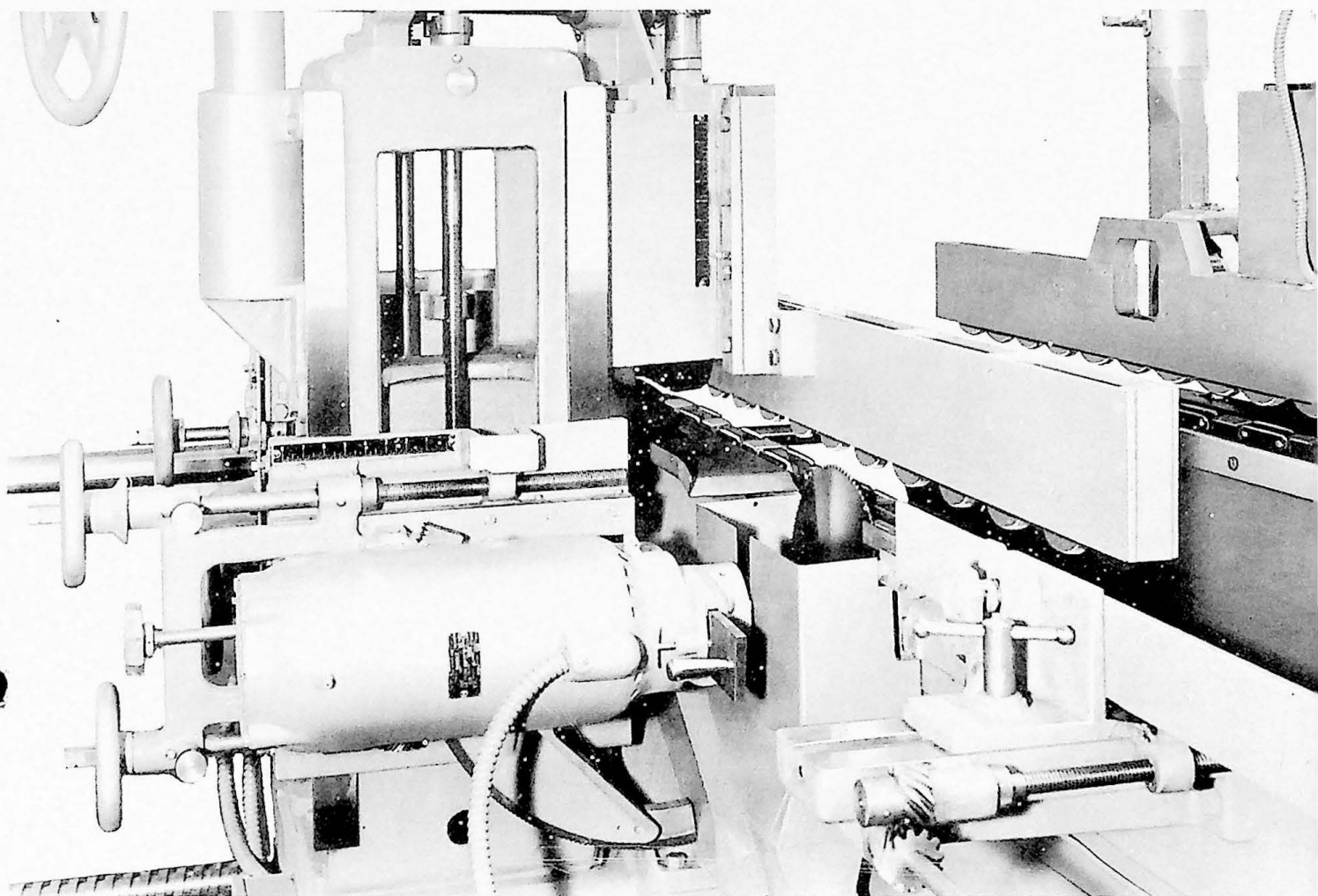
The accurate, smooth cutting of these heads, especially under high-speed production, is due in a great part to the sturdy column and base construction of this machine.



Rear-mounted horizontal corner-easing units are specially designed to bevel or round the edges on the long side. This improves the appearance of the doors and permits easier handling than would be possible with sharp corners.

The lower unit is of the rigid type, while

the top unit is hinged and provided with a guide roller mounted from an overhead arm. Riding on the door, the roller allows the hinged unit to maintain uniform easing cuts regardless of slight variations in door thickness. Cutterheads with carbide-tipped knives are recommended for this operation.

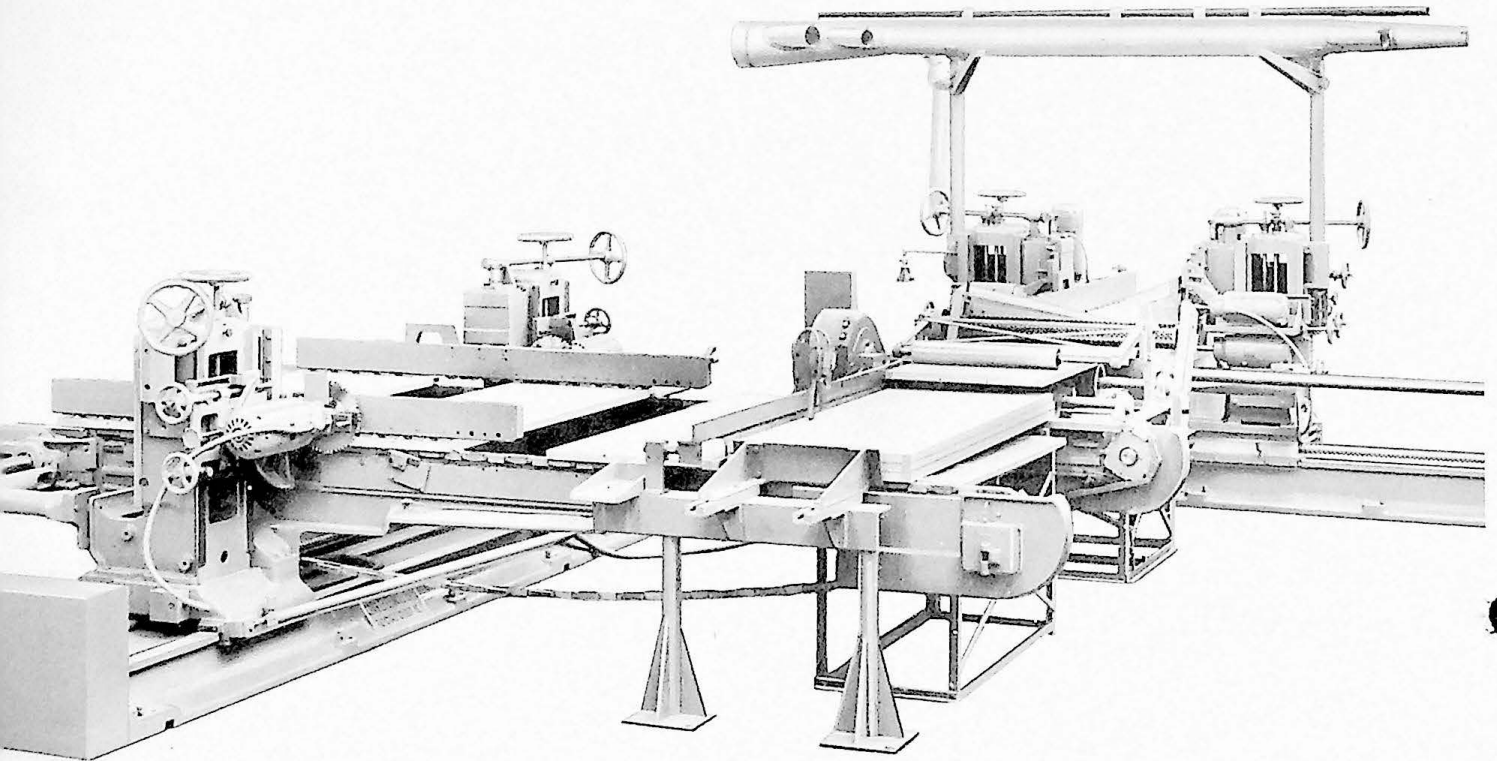


If the daily production of doors is sufficient to warrant the additional investment, the most efficient installation would consist of two No. 542 machines. One of these machines is used for jointing and easing the long edges while the other No. 542 would be arranged to saw the doors to correct length. The second machine or Cut-Off Saw is usually placed at a 90-degree angle to the first machine.

With a tilting front unit a single No. 542 can be furnished with the necessary extra equipment so that it can be used for both

jointing and cutting off. The photograph above shows the 90-degree tilting front unit in a horizontal position for sawing from below.

In addition to the jointing equipment, the dual purpose would have to be equipped with saw blades and mounting sleeves, chip-breakers, lower dust hoods, and sheet metal chutes to carry offal strips. Production of over 1500 doors per 8-hour day is easily obtainable with a single No. 542 machine, using it first for jointing and later for sawing.

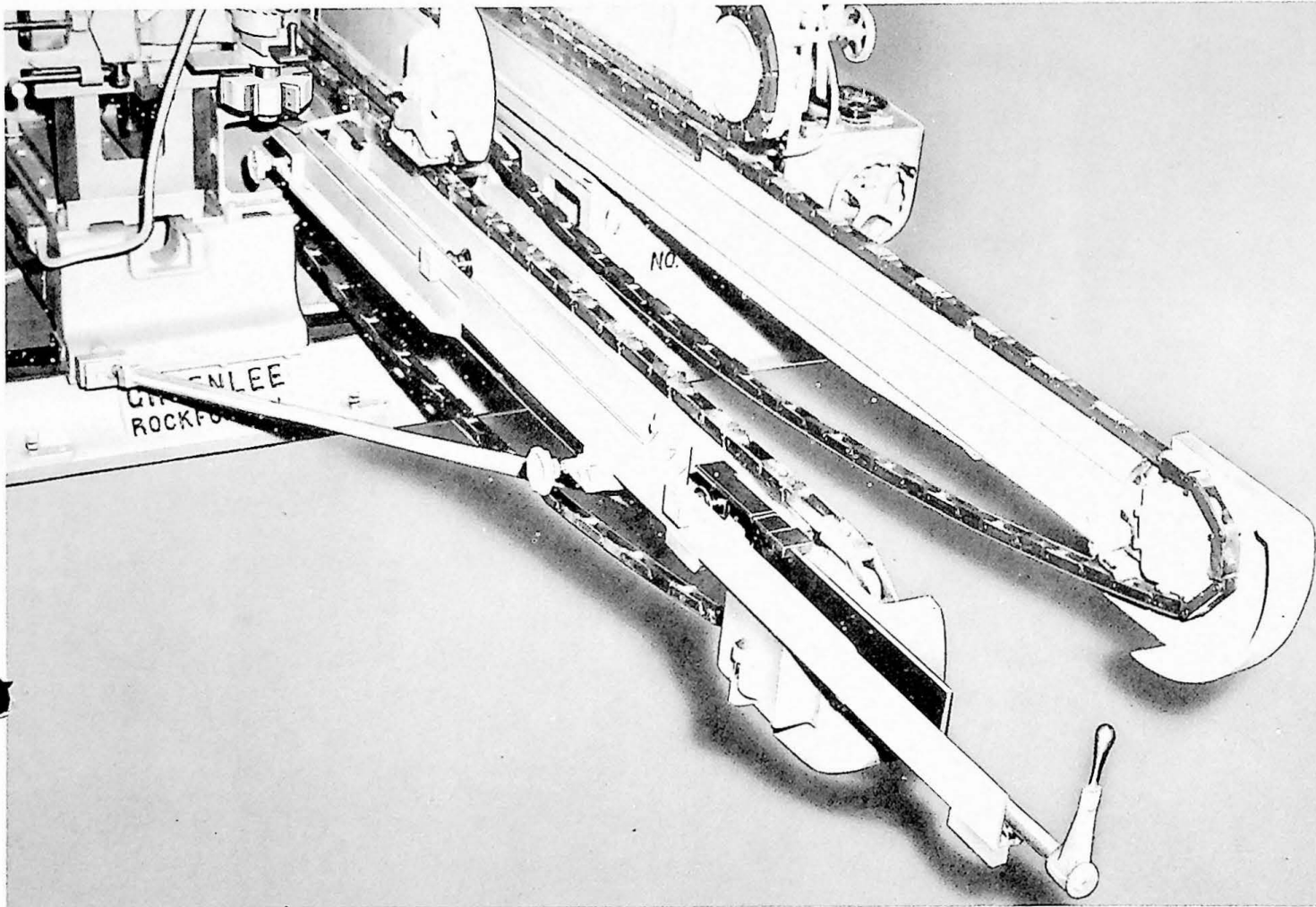


The trend in door sizing has been to complete the machine operations, both sizing and cutting off to length, in a continuous flow. To still further reduce cost and eliminate all handling between the first and second machine, automatic door transfer equipment has been added.

In the photograph above, the doors travel from the jointing and easing machine in the background, over powered, rubber-covered rollers to a hopper arrangement and then into the cut-off machine in the foreground. When leaving the first machine at the doors are

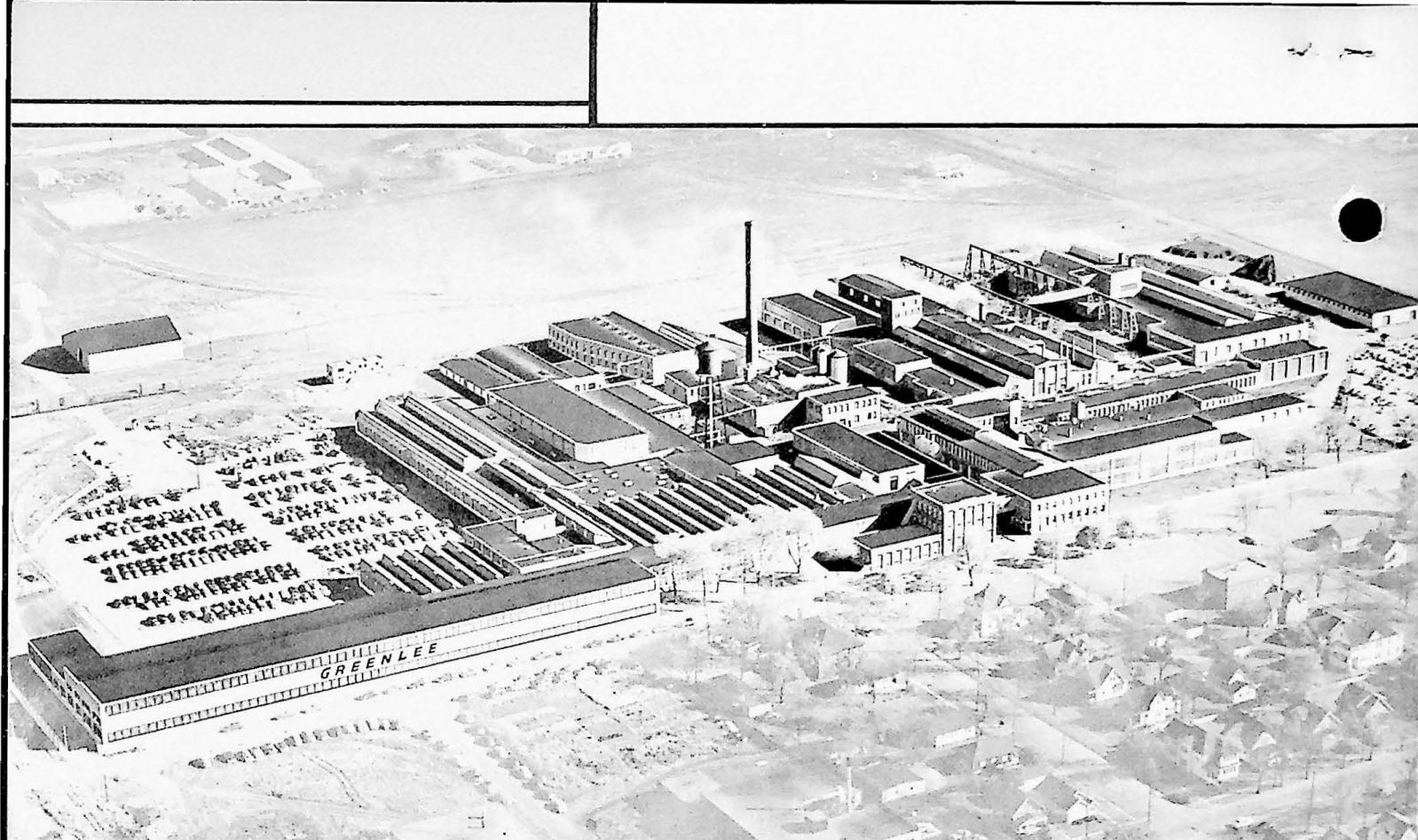
accelerated by the rollers and at the same time all chips and dust are removed by a chain-driven brush and a special exhaust system to prevent marring of the doors in the hopper. The doors are fed from the hopper by feed dogs on the long chain beam into the end-sawing operation.

This setup completely eliminates any manual handling usually needed to position the doors in the second machine, leaving only the feeding of the first machine and the removal of the completely sized doors from the second machine.

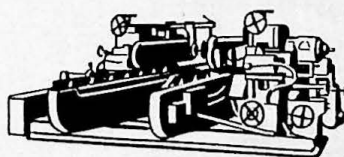


The special rolling gauge, shown above, was designed as an aid to the operators of No. 542 Machines that are set up for jointing and easing the long sides of hollow-core flush doors. It consists primarily of a shaft with front and rear locating blocks, operating between top and bottom rollers. The locating gauge blocks contact the door stiles at the front and rear, and position the doors before they enter the pressure hold-downs. This equalizes the amount trimmed from each stile.

Until the door is firmly held in position by the hold-downs, the gauge travels with the door and is disengaged from the stile by cam action and returned to the loading position. The front locating block is adjustable to various door lengths, and the rear block contacts both the side and end of the left-hand stile. Production with this gauge is about the same as without it, except that any visual alignment of the doors by the operator is unnecessary.



the home of
GREENLEE
WOODWORKING
MACHINERY



Occupying a tract of 29 acres of land, the Greenlee plant at Rockford, shown above, has every facility needed to produce its many products. Continuous planning and expansion has resulted in modern, mostly fireproof buildings that occupy a space having approximately 1650 feet of frontage by 700 feet in depth. Rockford, Illinois is located 85 miles northwest of Chicago, with rail, bus, and airline service available, as well as airport facilities for private planes.

Every step, from the drawing board to the shipping dock, is controlled by Greenlee in manufacturing the machines it produces. This results in the finest woodworking machinery with high production and accuracy as their standard.

In addition to its woodworking machinery line Greenlee produces mortising and boring tools for machine use. Woodworking hand tools are also produced as well as tools for the electrical, plumbing and other construction trades, including hydraulic pipe benders and pushers. Two modern, mechanized foundries produce quality castings for Greenlee products and for other manufacturers.

The Greenlee metalworking machinery division builds multispindle automatic bar machines and special machinery ranging from automatic indexing machines to complex, multistation transfer machines doing a wide range of operations. Producing these precise metal working machines require the best in manufacturing equipment and personnel. This ability to manufacture precision metalworking machinery is utilized fully in producing Greenlee Woodworking Machinery.

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