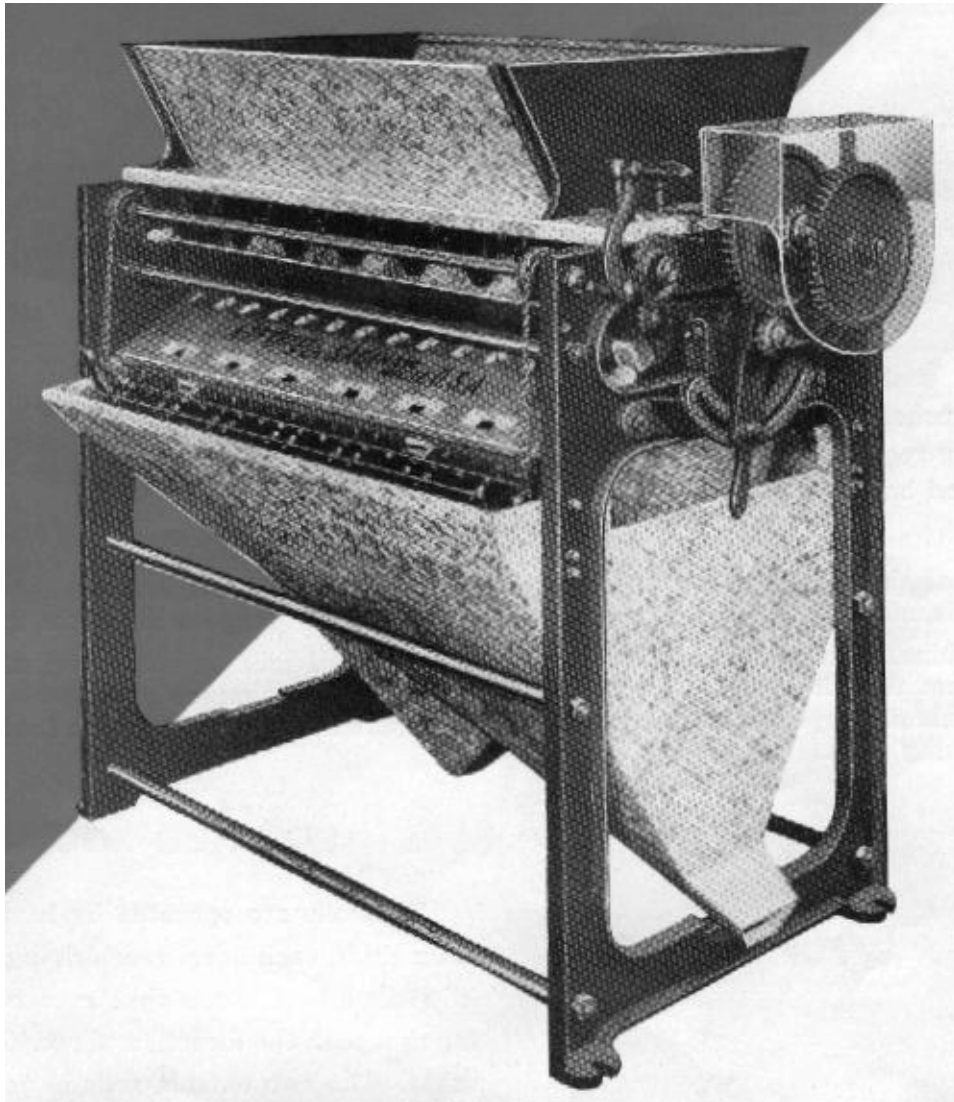


# *The* CLIPPER

GIANT Bean Picker



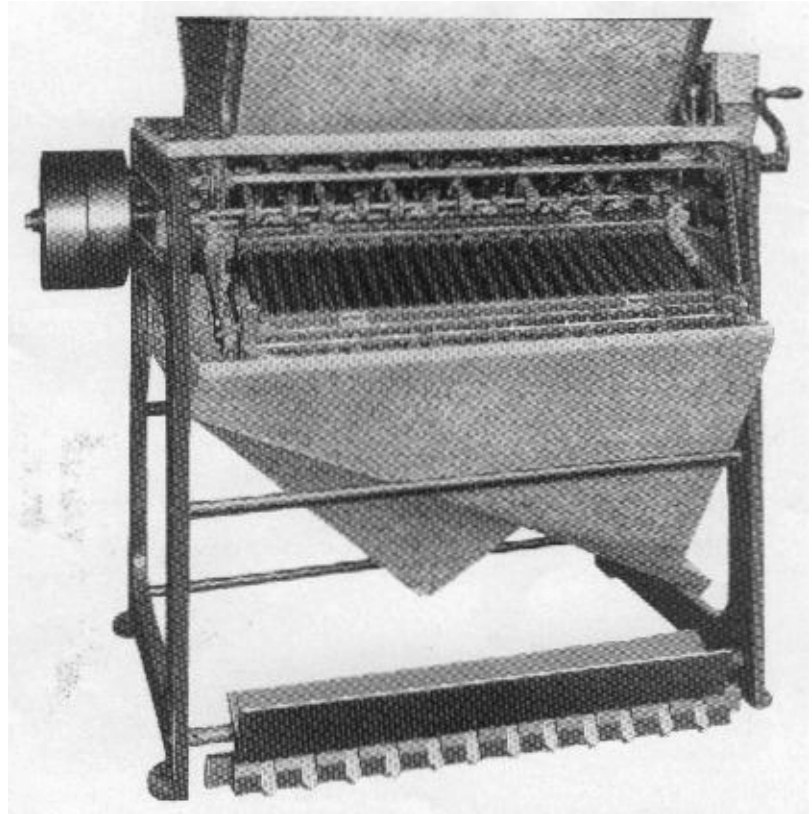
**A. T. FERRELL & CO.**

SAGINAW, MICHIGAN

## GENERAL DESCRIPTION

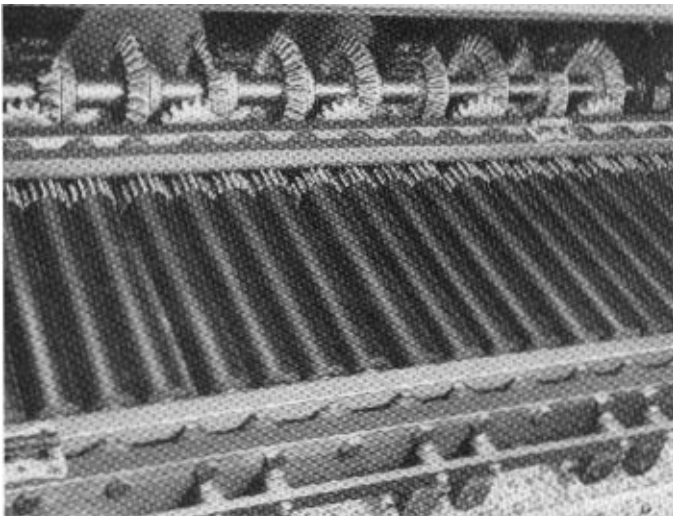
THE CLIPPER GIANT Mechanical Bean Picker is a machine designed to reduce hand picking of beans to a minimum, to have a large capacity, and to be easily and quickly adjusted to the variations in different lots of beans.

It is merely necessary to keep the hopper supplied with beans, see that the rolls are properly adjusted as to spacing apart and pitch, and the machine will automatically cull out all split, rough and imperfect beans as well as dirt and stones and deliver the carefully selected good beans at a rate of 20 to 30 bushels per hour. The only hand picking required will be to cull out discolored beans.



The actual picking of the beans is done by twenty-four pairs of special composition rubber rolls carefully vulcanized to the exact degree of hardness for the purpose as shown by durometer tests. The machine is double sided, there being twelve pairs of rolls on each side, mounted in pivoted frames so that the pitch of the rolls can be varied at will by means of a crank. Each side is fed from the common hopper by means of six rotating feed wheels, each of which feeds beans on to two pairs of picking rolls.

## POSITIVE ROLL DRIVE

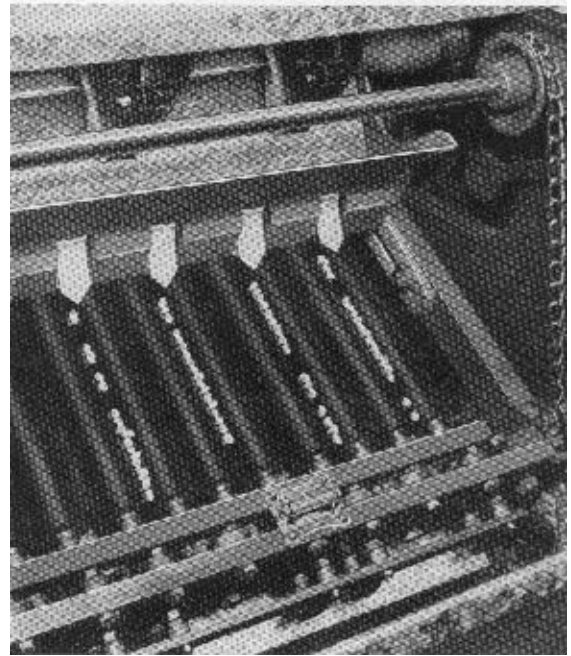


Close-Up of Roll Drive

The rolls are operated by bevel gears from the main shaft, each bevel gear driving a group of 4 rolls all geared together so that in each two rolls operating as a pair, the direction of rotation is toward each other. The two outside rolls in each group of four are carried in bearings so pivoted that they can be swung either closer to or away from the two middle rolls. These pivoted bearings are all linked together on each side of the machine so that all the rolls on that side are simultaneously adjusted for spacing by shifting one lever, which can be locked at any setting.

## ACTION OF PICKING ROLLS

As the beans are fed from the hopper on to each pair of picking rolls, they slide down the trough between the two rolls, and as the rolls are revolving toward each other they seize all rough, irregular and imperfect beans and other trash and force them through between the rolls into the cull spout below. The smooth, perfectly shaped beans offer no opportunity for the rolls to grip them, and hence slide down the trough of the rolls and into the good bean delivery spout. The spacing apart of the rolls in each pair regulates the fineness of the picking, and the pitch of the rolls regulates the speed of travel of the beans down the rolls.



Rolls in Action

## VARIABLE FEED

The rate of feed of the beans to the rolls is governed by the speed of the feed wheels in the hopper, and this can be varied by changing the gear ratio of the feed drive. Change gears are furnished to provide three separate rates of feed.

Delivery of good beans may be had at either end of machine, as ordered.

### SPECIFICATIONS

Capacity ----- 20-30 Bushels per Hour  
Power Required-----1 H.P.  
Size Drive Pulley-----12x3 Tight and Loose  
Speed of Drive Pulley-----100 R.P.M.  
Height, Overall-----5 feet  
Length, Overall-----5 1/2 feet  
Width, Overall-----3 1/2 feet  
Shipping Weight-----1200 Pounds  
Code Word-----GIANT

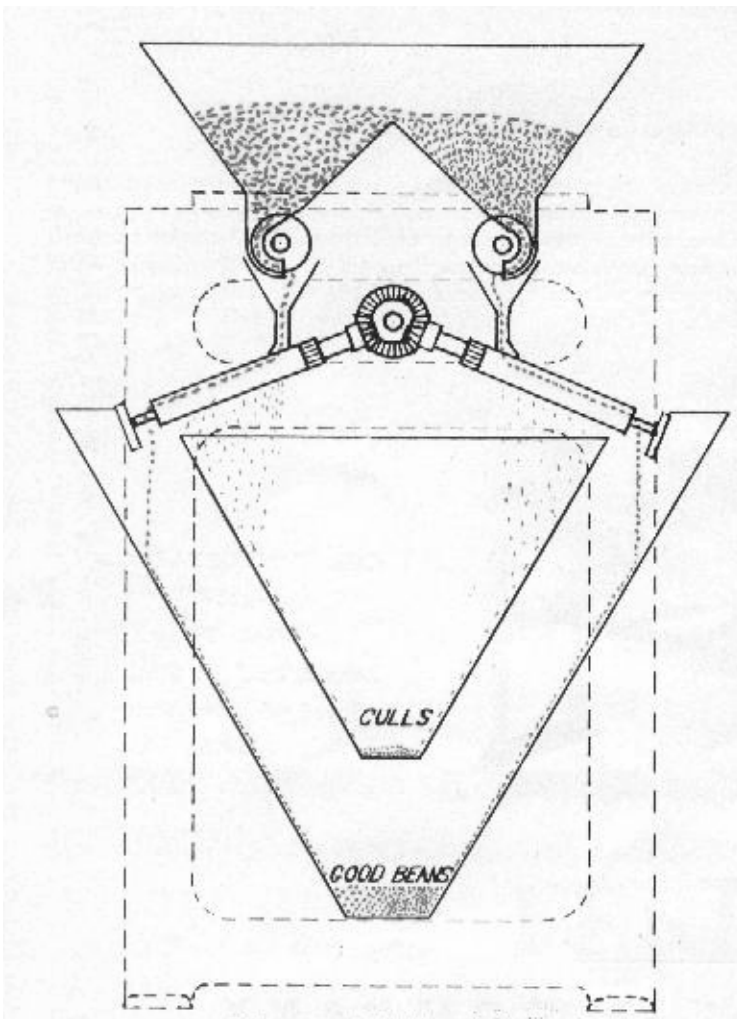


Diagram of Picking Action



The "Clipper" Foot-Thread Picker  
 Height 44"  
 Floor Space 24" x 31"  
 Shipping Weight 70 lbs.  
 Code Word: CARPENTER

#### FOOT POWER BEAN PICKERS

We manufacture two models of foot power operated hand picking machines, which are of the same size and general construction, except for the hoppers and bean feeding mechanism. Both have canvas or rubber belts 6 inches wide, cut off slides for regulating the flow of beans, and are equipped with 2 cull trays, one for each side of the machine.

Discharge spouts are provided to deliver the good beans at a convenient height to discharge into, a container placed at the rear.

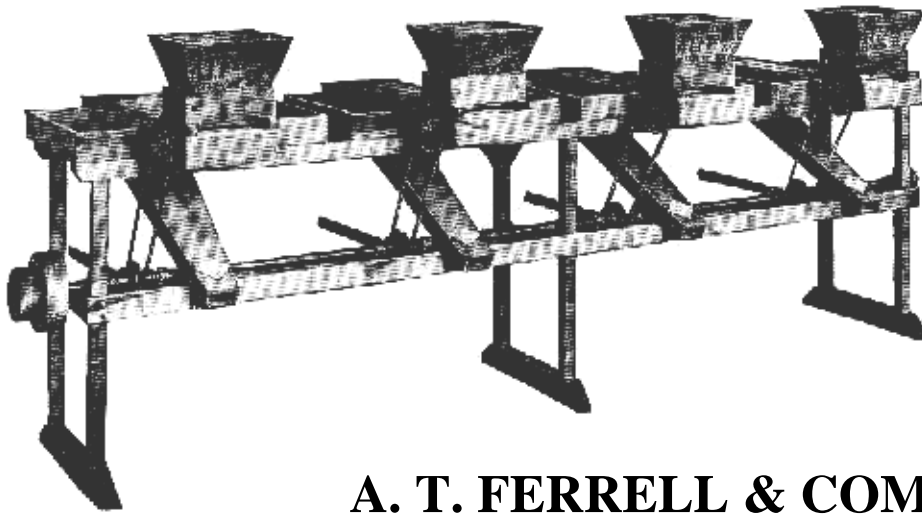
The Clipper pickers have a shaker pan operated by a ratchet wheel to agitate the beans in the feed hopper, while in the Bacon pickers this is accomplished by an oscillating loop of heavy wire which is kept in motion by a crank. The machines operate at equal efficiency with the halt speed always under the operator's control. In operation the Bacon pickers are a little quieter than the Clipper, but do not have the non-reversing feature of the latter.



The "Bacon" Foot-Thread Picker  
 Height 42"  
 Floor Space 24" x 31"  
 Shipping Weight 70 lbs  
 Code Word: CORONET

### POWER DRIVEN BEAN PICKERS

For power operation Clipper or Bacon pickers are furnished in gangs of four, five or six, mounted on a single stand and driven from a line shaft through individual knee operated clutches and bulls. This gives each operator independent control of the picking belt speed as well as the flow of beans from the separate hopper. Each station requires a space of two foot and is provided with two cull trays and a separate bean discharge spout. Twenty-five Power Bean Pickers can be operated with on one-half H.P. motor. These power pickers can be furnished with small hoppers five inches high as shown, or with largo hoppers twelve inches high.



Code Word: CATARACT  
 Height 37"  
 Width 28"  
 Length 2 ft. per Station  
 Speed of Drive Shaft  
 60 R.P.M.  
 Shipping weight 200-300 lbs.

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