

Goldens' NEW MODEL Horizontal Belt Power Three-Roller Cane Mills

SELF-CONTAINED, WITH SELF-OILING BEARINGS

(PATENTED)

The Mill is extra heavy and is designed somewhat after the lines of large mills used in sugar manufacturing plants. The smallest size mill has an approximate capacity of 150 gallons per hour, while the largest has an approximate capacity of 600, and require approximately, 5, 7, 10, 20, and 30 H. P. for the five sizes.

BED PLATE

The Bed Plate is massive and supports the housings, rolls, gears, driving pulleys, etc., and is machined where housings rest on it, making a rigid, self-contained mill, which once set up ready for running at our shops, remains so and can be shipped anywhere and started up without the trouble usually experienced where the mill and driving gear have separate supports. One heretofore objectionable feature in other power mills has been the exposed gearing, making them wear fast, and dangerous to operate. This feature we remedy by using a system of gearing enclosed in gear covers, except the large gear, which being an internal gear makes its own guard besides making a close, compact and safe mill to operate.

HOUSINGS OR UPRIGHTS

Are heavy and machined top and bottom, and also the roll journal caps are machined to fit housings. They are tied with horizontal and vertical bolts.

ROLLS

The Rolls are relatively longer than in other mills with the same diameter rolls, thus giving greater capacity. The large roll shell is extra heavy with extra large journals resting in babbitted boxes or bearings, while the small rolls are solid, with extra large journals in babbitted bearings. All the rolls are grooved, and their journal boxes have horizontal screw adjustment. The first small roll can be adjusted to give any opening desired from $\frac{1}{4}$ " up to $\frac{5}{8}$ " between the first feed roll and the large roll, there always being $\frac{1}{4}$ " opening when roll driving gears are in proper position, as the first small roll is approximately $\frac{1}{2}$ " smaller in diameter than the pitch circle of its driving gear. The second small roll is approximately the same diameter as the pitch circle of the gear driving roll, and is always screwed tightly against the face of the large roll. This arrangement brings the gear in proper working position when feed roll is set out from large roll.

REVERSIBLE FEED

By changing the position of the first and second small rolls, and changing feed box discharge chute to opposite sides, the mill may be fed from opposite side, thus enabling operator to put mill in any desired position, and avoiding using crossed belt for driving.

GUIDE KNIFE OR TURNPLATE

The Guide Knife is self-adjusting whichever side the mill is fed from without regard to the adjustment of the rolls, and can be removed through gear teeth by removing gear cover, moving back small gear, screwing handle into knife and drawing out. To remove the plate in the other mills it can only be done by taking off main roll caps and lifting large roll, gear and shaft from housings, requiring considerable power and time.

FEED BOX

A great deal of juice is usually lost in power mills by squirting outside of mill, above and below feed box. Our new feed box saves the juice heretofore lost by a self-adjusting guard in the top of the box in combination with a projection on the bottom of box, making it practically impossible for the juice to get outside of mill.

DISCHARGE CHUTE

Our New Sheet Steel Scraper is attached to the top of the discharge chute, to clean the large roll, while another scraper is attached to the bottom, cleaning second small roll, this scraper being furnished with a screw adjustment for roll contact, and also leads escaping juice from discharge chute back into trough of mill.

SELF-OILING DEVICES

The adjustable journal boxes are supplied with oil from top of housings by brass oil cups with wicking through tubes, while the journals for large roll and pulley and pinion shaft journal are supplied with wick oiling caps of large capacity. This self-oiling arrangement for cane mills is a new feature, not used on other mills.

GEARING

We use the involute style of gearing, with ample width of face for the power required throughout; this style being especially adapted for transmission where the rolls which gear drive need to be adjusted, as in the first feed roll. All gearing and driving pulley is keyed to shafts.

SET SCREWS

Are large and made of steel, with case hardened point and jam nuts, which hold the rolls in positive position.

MACHINED SURFACES

All surfaces that have bearings on other surfaces are machined, where necessary.