

Illust. 1—The Old Red Mill.

Shafts are accurately turned, made of high-quality steel and securely keyed to the rolls.

A malleable guide knife adjusts itself to the rolls and keeps the cane going in the right direction.

Gears

Gears are cast from machine-cut patterns. They are connected with the rolls by clutches.

Bearings

The roll shaft bearings have separate brass bushings which can be replaced economically when worn out. Hard steel set screws adjust the bearings to take up lost motion due to wear.

Regular Equipment

Feed box, sloping lever cap, wrench and oil can. Fluted feed roll.

Extra Equipment

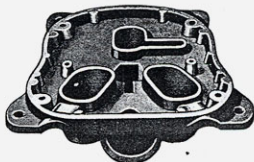
Straight or angle cap instead of sloping.

The Old Red Mill

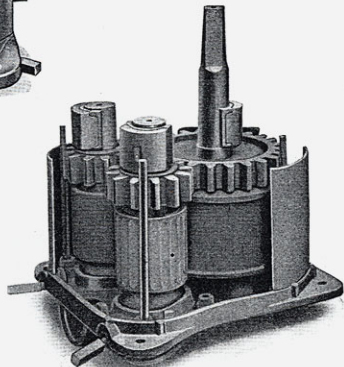
The Old Red Mill handles all varieties of cane and is made in sizes ranging from light one-horse and heavy two-horse. It is strong, light running, and splendidly finished.

Rolls

The rolls are of finest cast iron, free from "pin-holes" or flaws of any kind. Flanges on the large rolls keep the small rolls in place, and the cane between the rolls.



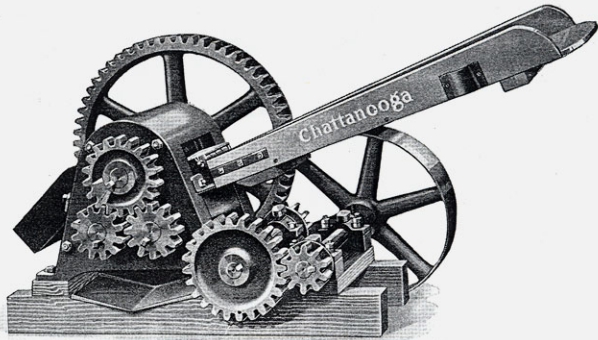
Illust. 2—The bottom plate, showing the high outer walls, and walls around shaft bearings.



Illust. 3—This shows the top and part of the sides removed to show gearing and rolls. Note the brass bearings, the clean cut gears, and the extension set screws for adjusting the small rolls at the bottom.

Specifications

No.	POWER REQUIRED	SIZE LARGE ROLL		SIZE SMALL ROLL		WEIGHT	CAPACITY GALS. JUICE PER HOUR	EVAP. TO USE
		DIAMETER	LENGTH	DIAMETER	LENGTH			
111	One-horse	10 in.	5 in.	5 in.	5 in.	386 lb.	35	No. 2
112	One-horse hvy.	12 in.	6 in.	6 in.	6 in.	556 lb.	40	No. 3
113	Two-horse	14 in.	7 in.	7 in.	7 in.	866 lb.	70	No. 4
114	Two-horse hvy.	16 in.	8 in.	8 in.	8 in.	1145 lb.	90	No. 5



Illust. 4—The No. 144-A double-gear, three-roll, belt power Cane Mill. Gear covers are furnished but are left off here for better illustration.

A Simple Double-Geared Mill

This is the oldest of the McCormick-Deering belt power mills. It is very simple in design but very strong and of good capacity. It is double-gear. The rolls are of the finest cast iron, free from "pin-holes" or flaws of any kind. The rolls are securely keyed to the shaft with steel keys.

A heavy juice pan on the mill delivers the juice to the side of the mill. All the gears are covered by sheet steel guards to prevent anyone from being caught in the gearing.

Bearings

The roll-shaft bearings have separate brass bushings which can be replaced economically when worn out.

The drive shaft and countershaft are accurately set in babbitted boxes and supplied with oil by waste boxes on the bearing caps.

Gears

The gears are made from machine-cut patterns and are very carefully meshed, which accounts in part for the small amount of power to work this mill to capacity. The gears are fastened to the shaft by means of close fitting steel keys. The shafts are made of high-quality steel accurately finished.

The mill is mounted on heavy skids, which form a rigid foundation, and make it easy to set the mill.

Regular Equipment

Feed table. Safety gear covers. Fluted feed roll.

Extra Equipment

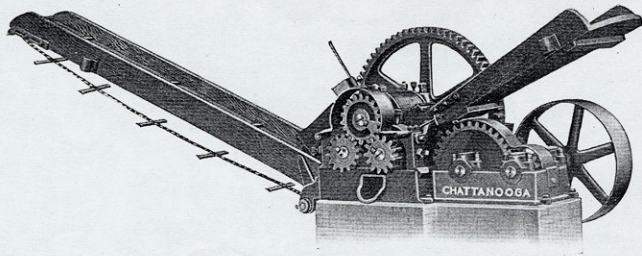
Bagasse carrier not furnished for No. 44 mills. 24, 30 or 42-in. pulley, 6-inch face. Juice pump.

Specifications

NUMBER	SIZE LARGE ROLL		SIZE SMALL ROLL		HORSE POWER REQUIRED	TYPE M ENGINE RECOM.	ENGINE R. P. M.	PULLEY RECOMMENDED		R. P. M. MILL PULLEY		DIAMETER PULLEY SHAFT	CAPACITY JUICE PER HOUR	ENGINE POWER	WEIGHT	NUMBER EVAPORATOR TO USE
	DIAM.	LENGTH	DIAM.	LENGTH				FOR 10 IN. ENGINE PULLEY	FOR 14 IN. ENGINE PULLEY	WITH 10 IN. ENGINE PULLEY	WITH 14 IN. ENGINE PULLEY					
144-A	9 in.	9 in.	6 in.	9 in.	5.19	H.	550	30 in. 6 in. face	42 in. 6 in. face	183	183	1 1/8 in.	175 gals.	1264 lb.		No. 5

NOTE: Engine data given for convenience. Engine not included with mill. Speeds figured for grinding 30 ft. of cane per minute.

Nos. 145-A and 171



Illust. 5—No. 145-A double-gear belt power Cane Mill.

Horizontal Three-Roll Mills

Nos. 145-A and 171 mills are horizontal, 3-roll power mills built on heavy, cast-iron bed plates, which minimize friction by holding every shaft and shaft bearing in exact alignment under strain of heaviest work. The housings are the same in design as regular sugarhouse mills and equally as strong in proportion to their capacity. All joints are planed to exact fit.

Rolls

Great care is taken in the mixing of the iron for the rolls and in the casting of the rolls. They are free from "pin-holes" or flaws of any kind. They are securely keyed to the shafts and are accurately turned and grooved to take hold of the cane and assure continuous feeding. Any roll can be removed without disturbing the others.

All necessary attachments for tightening the rolls or the drive and countershaft bearings are provided. All bolts that might have a tendency to work loose are provided with lock nuts.

Gears

Made from machine-cut patterns and accurately meshed. They are keyed to the shaft with steel keys. Steel guards cover all gearing. The speed of the gears and rolls is such that the mill is practically unchokable.

Bearings

The bearing box in which the small roll shafts work can be adjusted in or out by means of set screws, which are prevented from working loose by jamb nuts.

The roll shaft bearings are fitted with brass bushings, which provide a very smooth bearing and can be replaced economically when worn. The countershaft boxes are babbitted and fitted with brass liners of varying thicknesses for adjusting to take up wear. All main bearings are provided with hard oilers. The pinions and the counter gearing have a bearing on each side.

Guide Knife

Easy means is provided for adjusting the guide knife to adapt it to any position of the rolls. The guide knife accelerates the flow of the juice from the mill. Juice-splashes on the feed side of the mill protect the operator and prevent waste.

Regular Equipment

Feed table and wrench. Fluted feed roll.

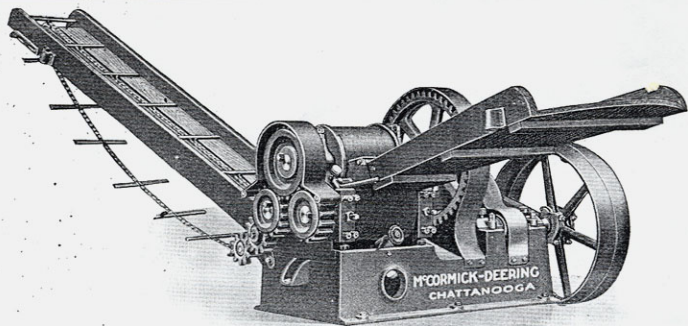
Extra Equipment

Bagasse carrier 5, 6, 8, 10 or 12-ft. Juice pump 24, 28 or 40-in. pulley, 6-in. face.

Specifications

NUMBER	LARGE ROLL		SMALL ROLL		HORSE POWER REQUIRED	TYPE M. ENGINE RECOM.	PULLEY RECOMMENDED		R. P. M. MILL PUL.		ENGINE R. P. M.	DIAMETER MILL PULLEY SHAFT	GALS. JUICE PER HOUR	NUMBER EVAPORATOR TO USE	WEIGHT LESS PULLEY
	DIAM. INCHES	LENGTH INCHES	DIAM. INCHES	LENGTH INCHES			FOR 10 IN. ENGINE PULLEY	FOR 14 IN. ENGINE PULLEY	WITH 10 IN. ENGINE PULLEY	WITH 14 IN. ENGINE PULLEY					
145-A	9	9	6	9	3.91	6 H.P.	28 in. D. x 6 in. face	40 in. D. x 6 in. face	193	196	550	2 1/8 in.	175	No. 5	1374 lb.
171	9	12	6	12	5.11	6 H.P.	28 in. D. x 6 in. face	40 in. D. x 6 in. face	193	196	550	2 1/8 in.	200	One No. 8 or Two No. 5	1704 lb.

NOTE: Engine data given for convenience. Engine not included with mill. Speeds figured for grinding 30 ft. of cane per minute.



Illust. 6—The No. 192-A Belt-Power Cane Mill. The feed table is furnished. The bagasse carrier can be furnished as an extra.

This is a Powerfully Built Mill

This is a heavily built mill, intended for those who grow a comparatively large acreage of cane. It is built on a heavy, cast-iron bed plate which holds all the working parts in rigid relation with each other, thereby preventing friction and making a light-running mill.

The Main Shaft has Three Bearings

The large roll and master gear shaft has three large bearings supplied with hard oil by compression grease cups. The tops of the boxes are fitted with thin plates of brass. Wear is bound to occur after continued usage, and by removing one of these brass plates, or shims, at a time, the bearings can be kept tight to prevent looseness. The bottoms of the gear shaft bearings are rabbitted.

The Master Roll is 12 x 12 Inches

The master roll is 12 in. in diameter with 12-in. face, and equipped with flanges which project over the edges of the small rolls. This feature and the grooving of the rolls assure the proper feeding

of the cane to the mill. The rolls are keyed to the shafts and cannot work loose. The small rolls can be adjusted to get the highest possible extraction. The roll-shaft bearings are equipped with removable brass bushings.

Adjustable Guide Knife

The guide knife can be adjusted as necessary. This adjustment is accomplished by means of a small hand wheel conveniently placed.

The gears are made from machine-cut patterns. The roll gears are keyed to the shaft with steel keys. The mill is double geared. All gears are covered with steel guards. Shaft bearings fitted with hard oilers.

Regular Equipment

Feed table. Fluted feed roll.

Extra Equipment

Bagasse carrier, 5, 6, 8, 10 or 12-ft. Juice pump. When ordering bagasse carrier or juice pump, specify mill for which wanted. 30-in. pulley, 8-in. face.

Specifications

NUMBER	SIZE LRG. ROLL		SIZE SM. ROLL		HORSE POWER REQUIRED	TYPE M. ENGINE RECOM.	PULLEY RECOMMENDED		R. P. M. MILL PUL.		DIAMETER MILL PULLEY SHAFT	GALLONS JUICE PER HOUR	NUMBER EVAPORATOR TO USE	WEIGHT LESS PULLEY	
	DIAMETER INCHES	LENGTH INCHES	DIAMETER INCHES	LENGTH, IN.			FOR 10 IN. ENGINE PULLEY	FOR 14 IN. ENGINE PULLEY	WITH 10 IN. ENGINE PULLEY	WITH 14 IN. ENGINE PULLEY					
192-A	12	12	8	12	7.65	10 h.p.	28 in. D. x 6 in. face	40 in. D. x 8 in. face	152	149	425	2 $\frac{1}{8}$ in.	250	One No. 8 or Two No. 5	2618 lb.

NOTE: Engine data given for convenience. Engine not included with mill. Speeds figured for grinding 30 ft. of cane per minute.