ILLUSTRATED CATALOGUE

and PRICE LIST

CANE MILLS
EVAPORATORS
SYRUP KETTLES
FURNACES etc.

SOUTHERN PLOW COMPANY
COLUMBUS, GEORGIA.
U. S. A.

Illustrated Catalogue and Price List of

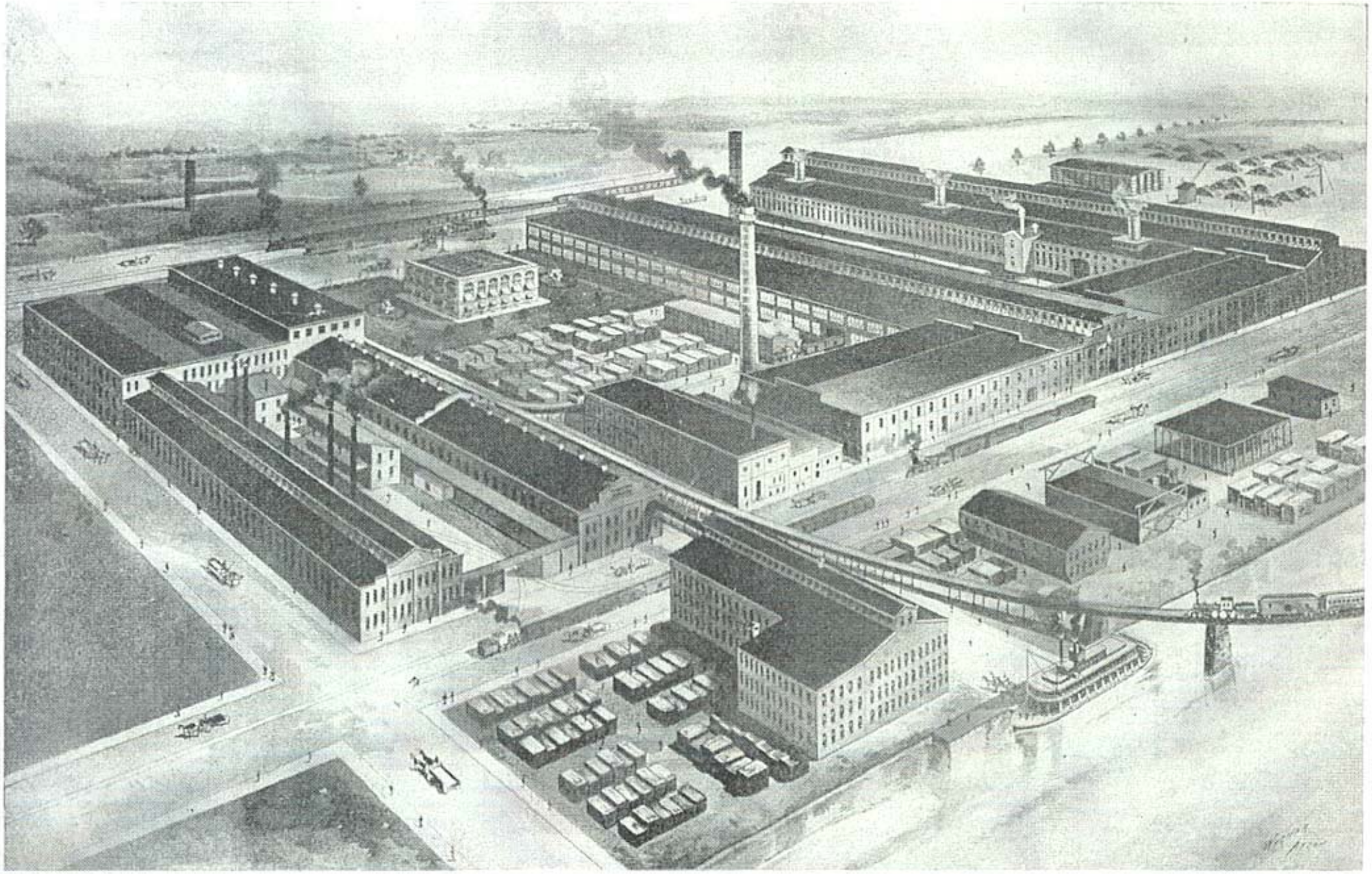
CANE MILLS

Evaporators, Syrup Kettles, Furnaces, Etc.

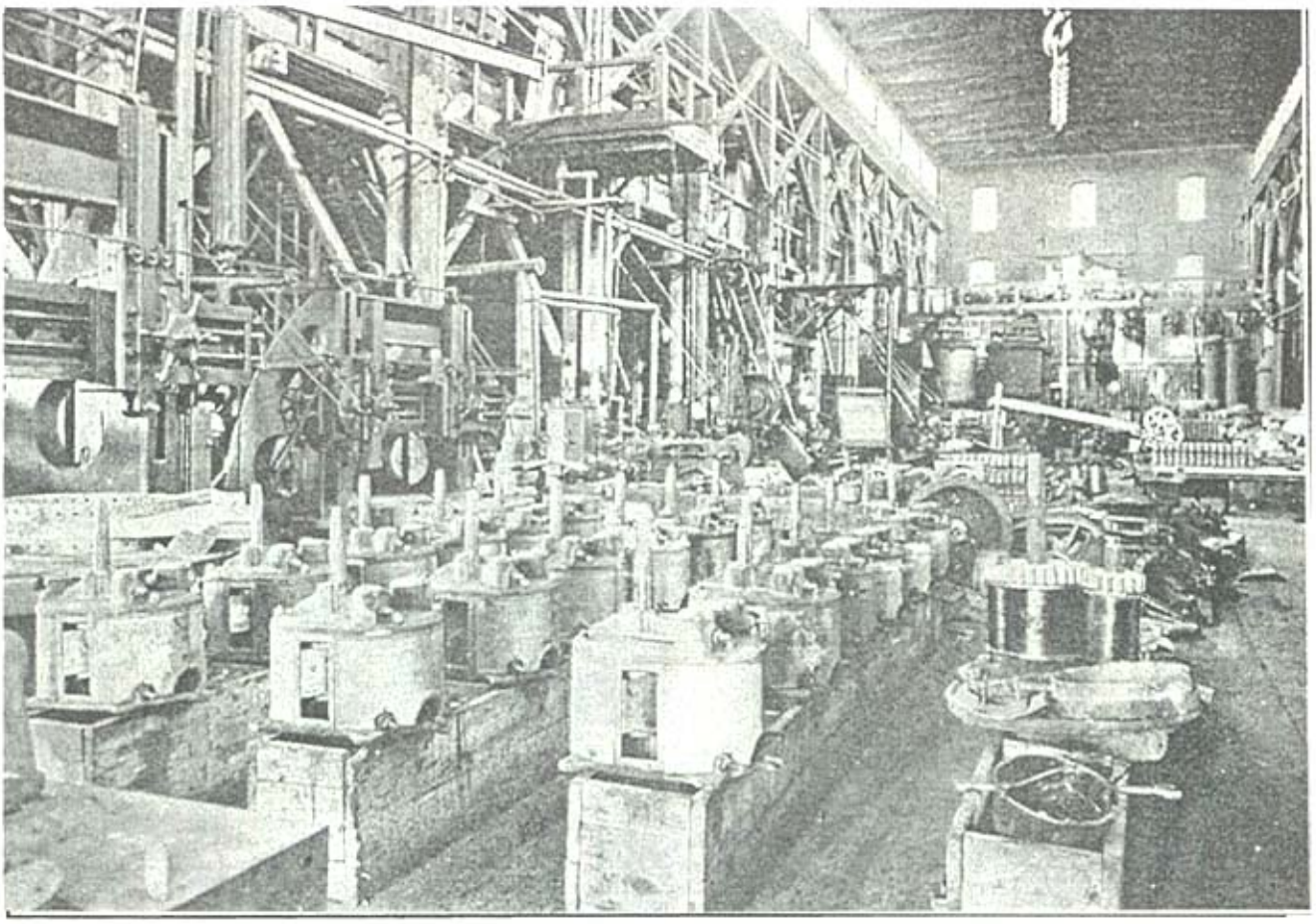
Manufactured by the

Southern Plow Company

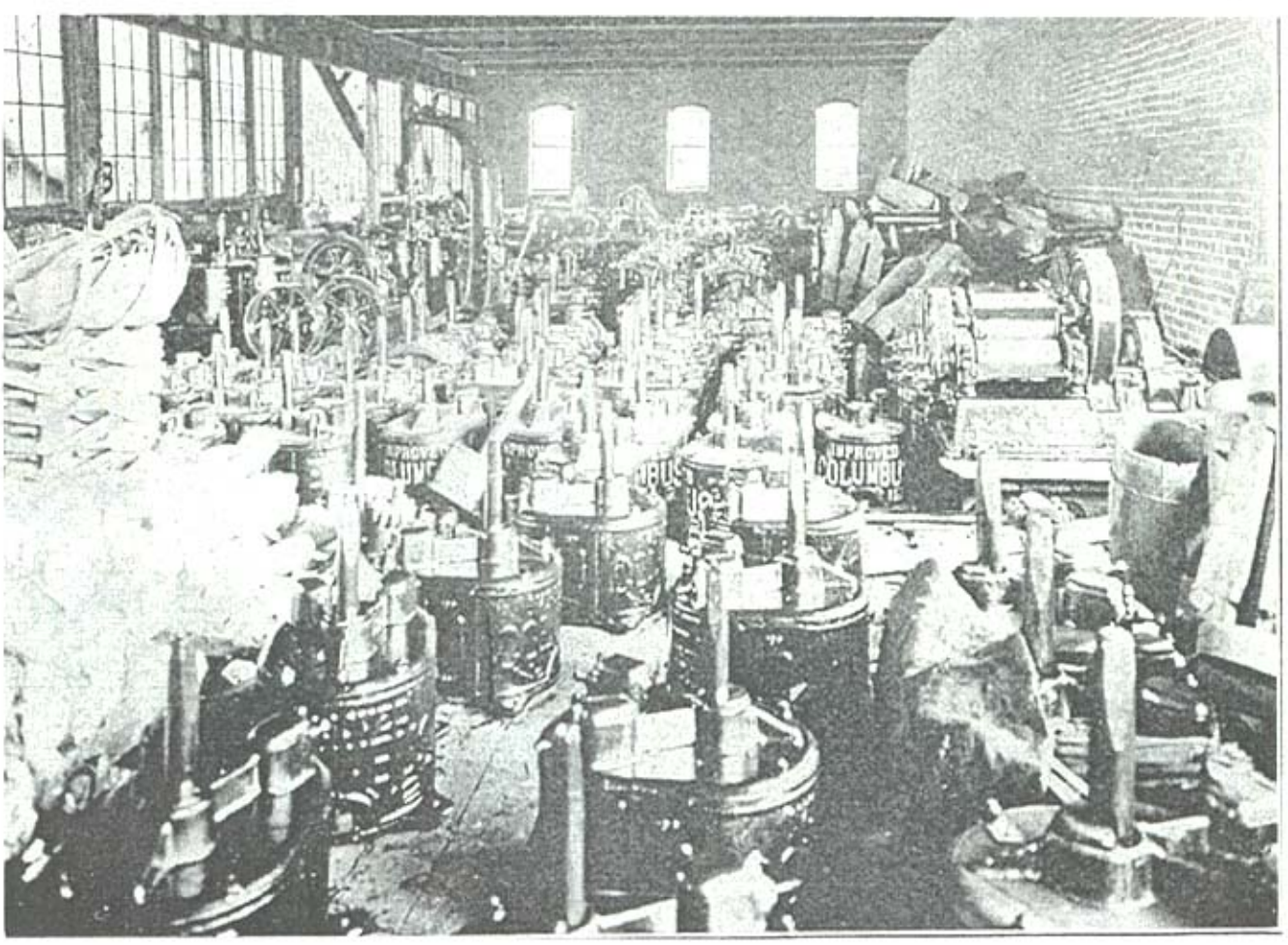
Columbus, Georgia, U. S. A.



PLANT OF SOUTHERN PLOW CO., COLUMBUS, GA., U. S. A.



Assembling Improved Columbus Cane Mills.



Cane Mills in Paint Room.

Improved Columbus Cane Mills Three-Roller

IN our Improved Columbus Cane Mills we have embodied IMPROVED features not found in other mills. While following the most approved general lines of construction contained in our Standard Three-Roller Mills, which have so long stood in the front rank, we have sought to combine greatest Strength, Simplicity and Neatness. In accomplishing this our Mills are heavier, stronger and much neater than any others. They are more completely enclosed than any other.

Bottom Plate is flat on bottom—having four elevated lugs at corners so as to make them easy to handle.

The Sockets in which the lower Bearings fit are cast onto inside of Bottom Plate. They are heavy and strongly ribbed. By reason of this unique construction, **it is impossible for any oil or grease to get into the juice.** This makes it easy to get at bottom Set Screws for adjustment.

Bottom and Top Plates, also the Staves, are heavy and plain, having smooth, beveled, paneled edges, the metal being carefully distributed so as to afford greatest strength where most needed.

Large Roll is smooth on top, having four oblong holes through top of same for receiving Lugs on gear. These holes taper to a larger diameter at bottom. The projecting Lugs on gear are larger on outer end than at base where they join body of gear; therefore, they form a positive interlocking clutch.

Small Rolls and Gears also have under-cut and perfectly interlocking clutches.

By reason of these latest improved clutches **the greater the strain** on the mill **the tighter** the Gears **press down** against top of rolls, **making it impossible for gears to work upward.** They do away entirely with the "slack" found in other Mills, which lost motion inevitably causes breakage.

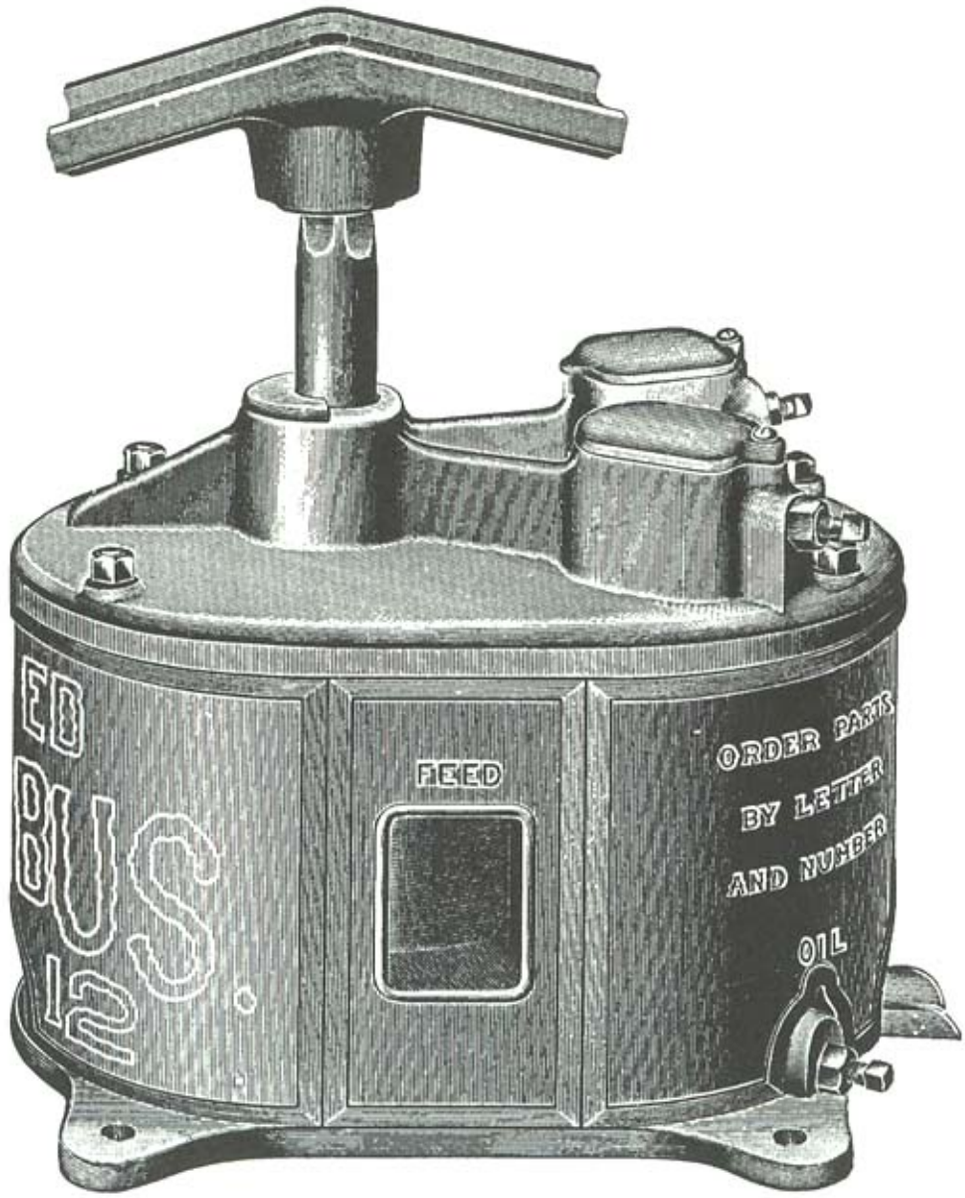
Mills have large, turned steel Shafts. Gears are accurately bored to fit Shafts.

Guide Knife is of substantial design—**jointed straight** and **ground to a knife-edge**—which makes it fit perfectly against Small Rolls, thereby positively guiding cane through Mill. No other make of Cane Mill possesses this improved feature. It fits snugly into a socket on Bottom Plate, making it rigid, but can be lifted out and replaced without disturbing any other part of the Mill.

The Feed Box and Outlet Box have extension apron to convey the cane directly to and from the Rolls. The Outlet Box has Steel Scrapers to keep the Rolls clean. An opening is provided opposite Large Roll for oiling bearing, or for removing any accumulation

of cane chips, etc. These Mills are fitted with long, heavy Brass Bearings, which can be put in by anybody, anywhere. They always fit, cost very little and we can furnish them promptly from stock. Brass Bearings are far superior to any other kind.

In ordering, mention style Lever Cap wanted. We make three kinds: Double Drop, Single Drop and Straight. Usually ship Double Drop (as shown on Mill) where kind is not specified in order.



Three-Roller Mill for Animal Power

DIMENSIONS OF ROLLS

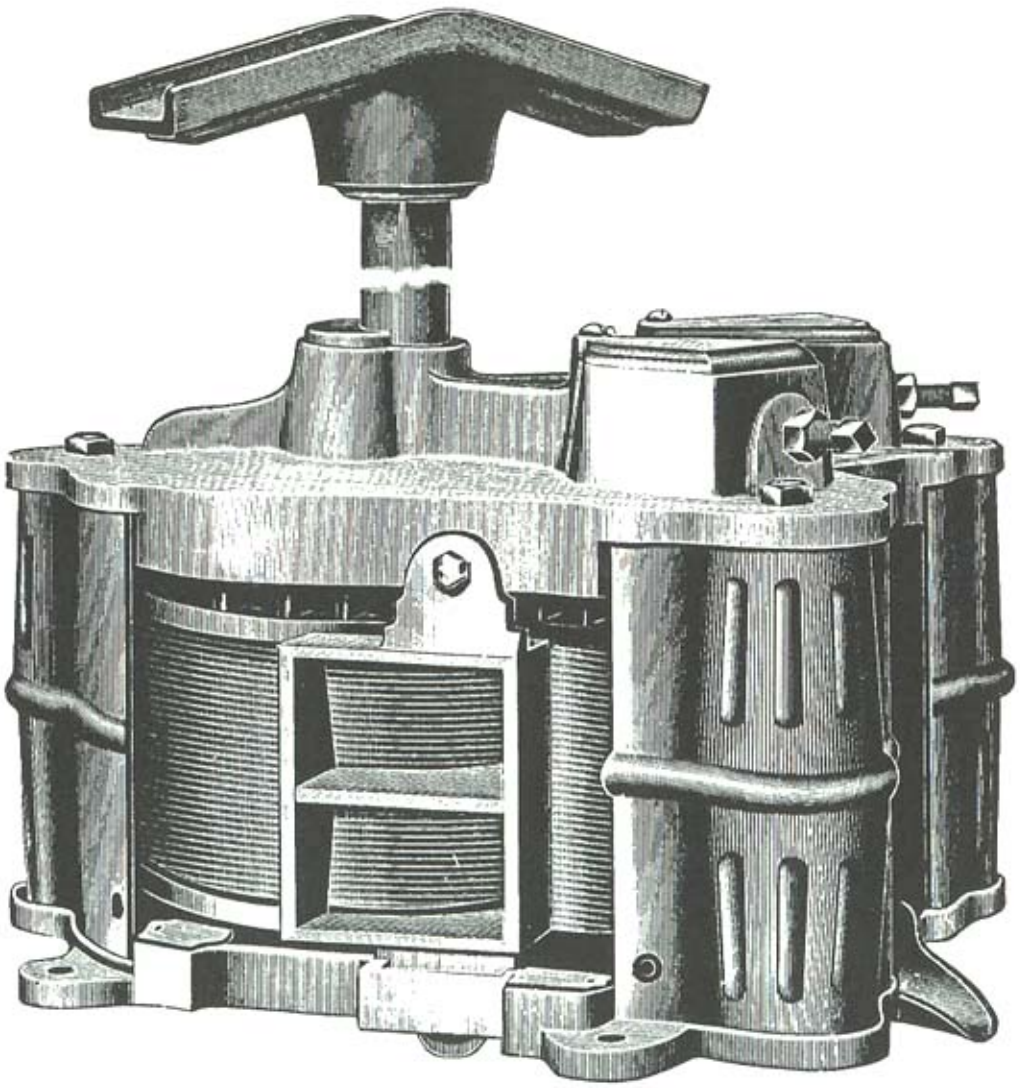
No.	Size	Diam. Large	Diam. Small	Length of Face	Est. Cap. Per Hour	Weight	List Price
11	One-Horse	10⅛ ins.	6⅛ ins.	5½ ins.	40 gals.	450 lbs.	$45.00
12	Reg. One-Horse	11⅜ ins.	6¾ ins.	6 3/16 ins.	60 gals.	626 lbs.	65.00
13	Two-Horse	13⅛ ins.	7⅛ ins.	7½ ins.	80 gals.	855 lbs.	90.00
14	Reg. Two-Horse	15 3/16 ins.	8 ins.	9¾ ins.	100 gals.	1310 lbs.	130.00
15	Heavy Two-Horse..	16 ins.	9 1/16 ins.	12 ins.	120 gals.	2000 lbs.	220.00

See CAUTION on page 29.

Standard Three-Roller Cane Mills

THE merits of these popular Mills are too well known to need much comment. They have been on the market a great many years and the fact that they are largely used in almost every section of the globe where cane is grown attests our claim that they are well made of best materials, and give perfect satisfaction.

Rolls perfectly balanced. Shafts made of extra quality steel, turned true. Gears accurately bored. Boxes fitted with removable Brass Bearings. Amply large Feed Box. Light running. Neatly finished. We can furnish Double-drop, Single-drop or Straight Lever Cap—as ordered. Double-drop usually sent unless otherwise ordered.



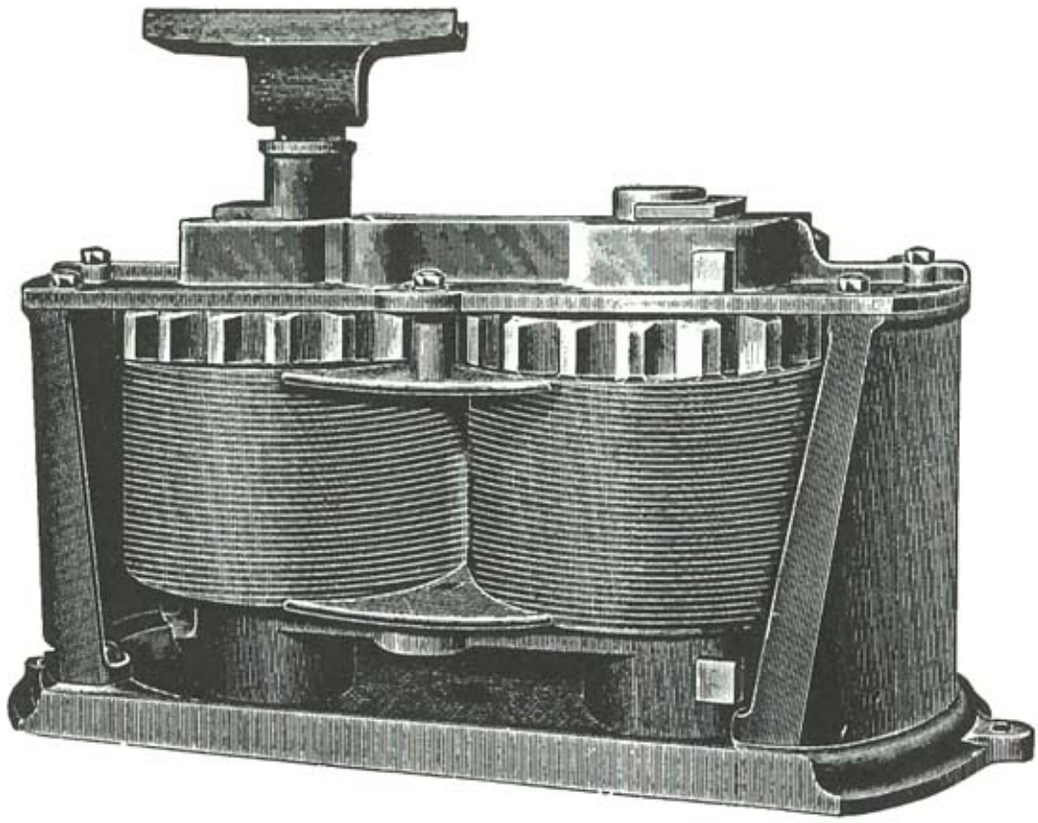
DIMENSIONS OF ROLLS

No.	Size	Diam. Large	Diam. Small	Length of Face	Est. Cap. Per Hour	Weight	List Price
0	One-Horse	10⅛ ins.	6⅛ ins.	5½ ins.	40 gals.	410 lbs.	$45.00
1	Reg. One-Horse	11⅜ ins.	6¾ ins.	6 3/16 ins.	60 gals.	550 lbs.	65.00
2	Two-Horse	13⅛ ins.	7⅛ ins.	7½ ins.	80 gals.	740 lbs.	90.00
3	Reg. Two-Horse	15 3/16 ins.	8 ins.	9¾ ins.	100 gals.	1125 lbs.	130.00

See CAUTION on page 29.

Two-Roller Cane Mills

THIS cut illustrates our heavy Two-Roller Cane Mill, complete, in substantial iron frame, ready for use. Bearings being very large, are made of Babbitt metal. No other make of Two-Roller Mills anywhere near their equal.



Two-Roller Mill for Animal Power

SIZE	Length of Face	Est. Cap. Per Hour	Weight	Price, Mill Complete
12-inch, One-Horse	8¼ ins.	50 gals.	900 lbs.	$ 90.00
14-inch, Heavy One-Horse	9¼ ins.	60 gals.	1090 lbs.	105.00
16-inch, Two-Horse	9½ ins.	80 gals.	1280 lbs.	125.00
18-inch, Heavy Two-Horse	12 ins.	100 gals.	1620 lbs.	165.00

Rolls for Wood Frames

With Lever Cap and Bolts

SIZE	WITH BOXES Weight	WITH BOXES Price	WITHOUT BOXES Weight	WITHOUT BOXES Price
2 Rolls, 12 inches Diameter	450 pounds	$ 55.00	400 pounds	$45.00
2 Rolls, 14 inches Diameter	575 pounds	65.00	525 pounds	55.00
2 Rolls, 16 inches Diameter	750 pounds	75.00	650 pounds	65.00
2 Rolls, 18 inches Diameter	975 pounds	100.00	900 pounds	90.00

Diameter of Journals on 12, 14 and 16-inch Mills 3 7/8 inches; on 18-inch Mill 4 7/8 inches.

See CAUTION on page 29.

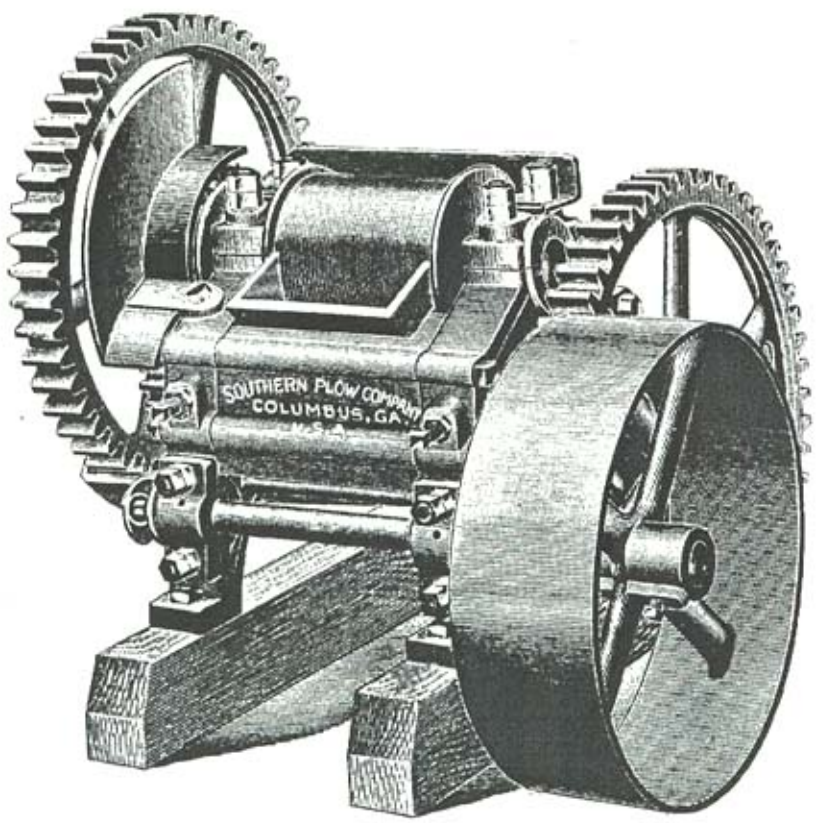
Horizontal Three-Roller Belt Power Cane Mills, No. 4 and No. 5

DESIGNED to meet the increasing demand for a small, light-running, low-priced Horizontal Belt Power Cane Mill. This demand is largely because of the great number of small, fast-running gasoline and oil engines now in use which are too small to properly operate larger Mills.

Either of these Mills, also a suitable Engine, may be mounted onto a wagon for transportation, or for operation.

Small Rolls adjustable. Ratio of gearing about 30 to 1. Guide Knife accurately jointed and ground smooth. **No choking.** Adjustable Scrapers. Juice Pan accurately fitted; **no loss of juice.** Dangerous points of gearing protected by Guards. Boxes babbitted.

Much **stronger** and more **compactly** built, although **lighter,** than any similar Mills. **Castings smooth.** Various parts **well machined** and all **fitted** in thorough **workman-like** manner. Greatest percentage of extraction. Light running. Largest capacity.



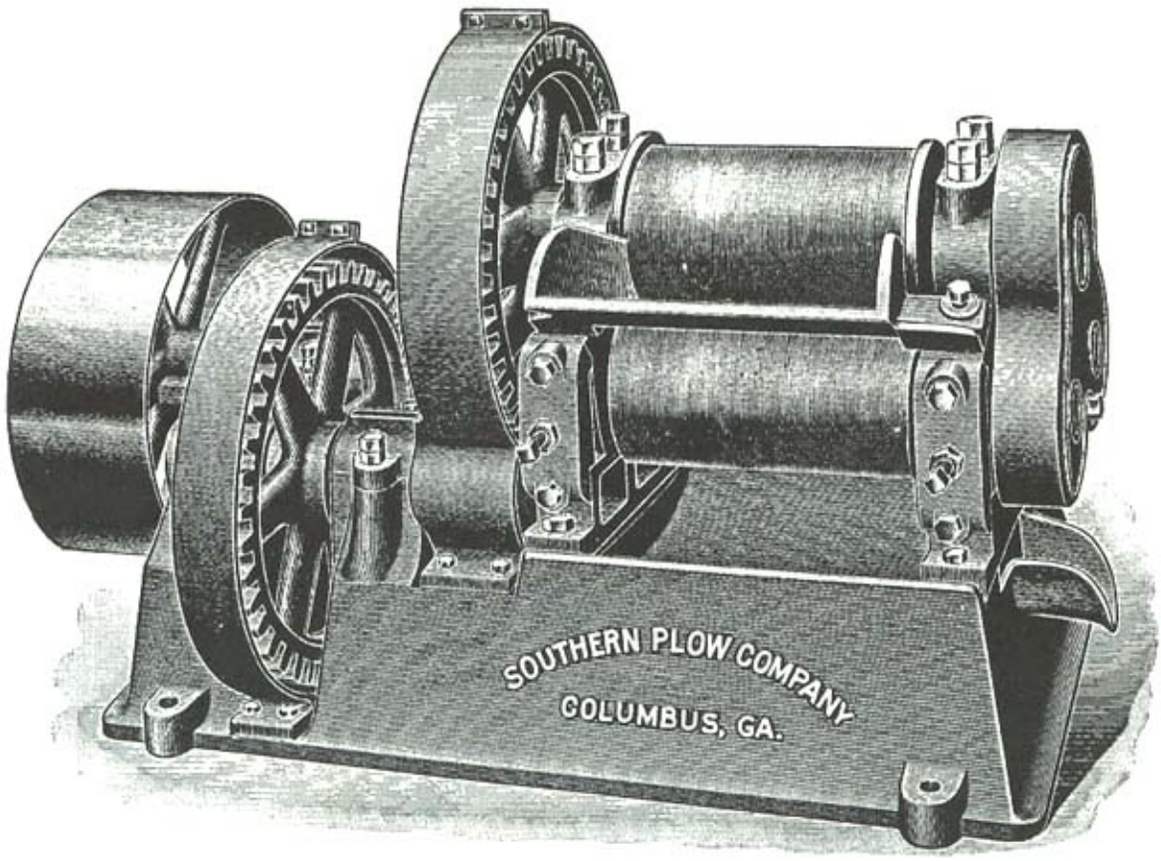
No.	Power Required	DIMENSIONS OF ROLLS Large Roll	Feed Roll	Back Roll
4	3 to 4 H. P.	8 x 6¾	8 x 4¼	8 x 4¾
5	4 to 5 H. P.	10 x 7¾	10 x 5¼	10 x 5¾

No.	Size Pulley	Speed Pulley	Est. Cap. Per Hour	Weight Pounds	List Price
4	12 x 6	400	75 gals.	625	$120.00
5	12 x 6	375	120 gals.	700	160.00

Horizontal Three-Roller Belt Power Cane Mills

No. 18 and No. 20

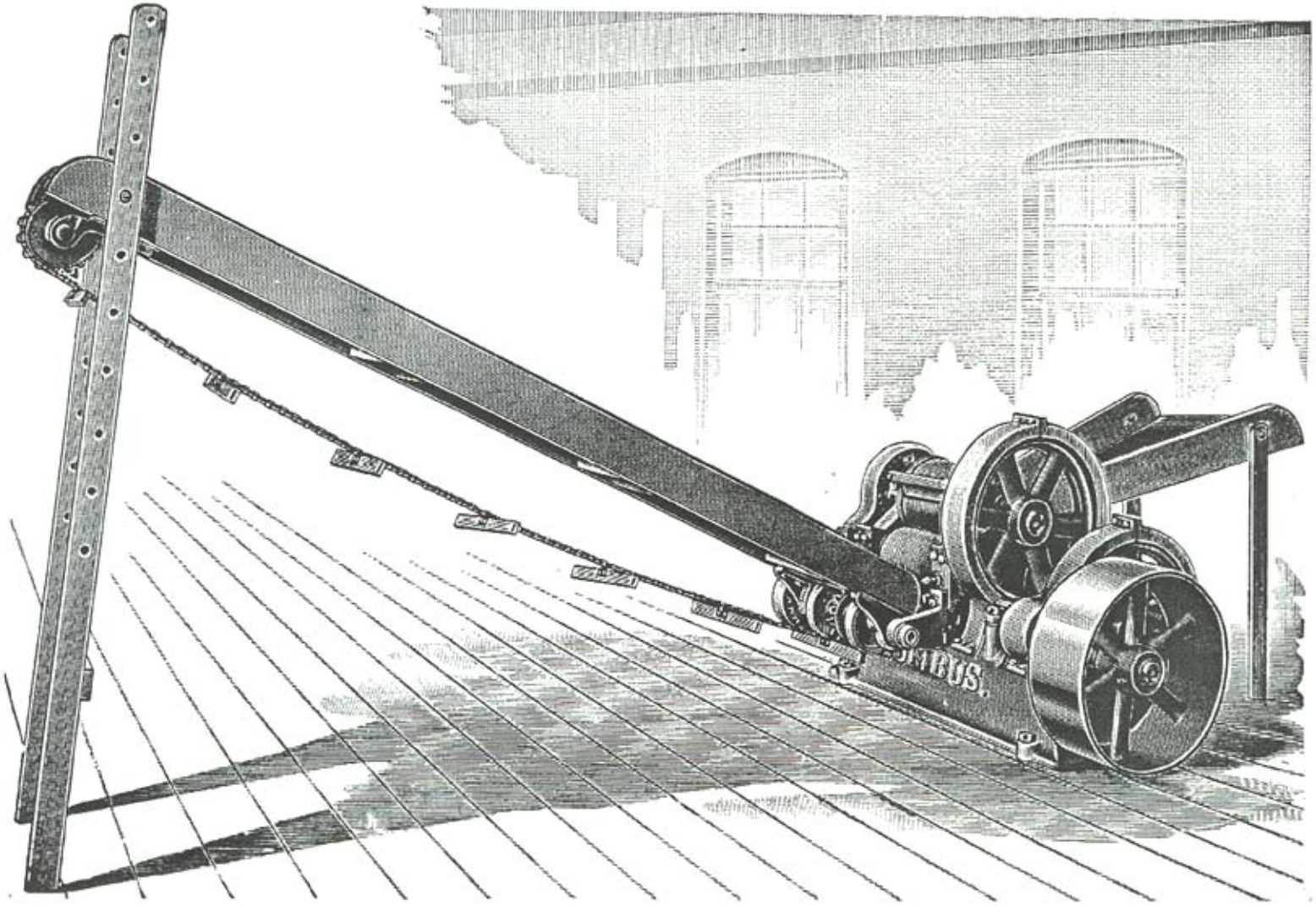
THESE Mills have Bed Plates of entirely new design, combining enormous strength, solidity and durability without unnecessary weight. **Double-geared.** Gears made from machine cut patterns, which promote even contact and uniformity of speed. Ratio of gearing—16 to 1. Extra long Bearings. Best quality cold-rolled Shafting. The end, or counter-gearing is outside of frame, hence no oil can get into juice. Large roll has strong flanges. Small rolls lathe-faced and fit snugly between flanges on large roll. **Adjustable** steel Scrapers to keep rolls clean. All gears have complete Guards.



No.	Power Required	SIZE OF ROLLS Large	SIZE OF ROLLS Small	Size of Pulley	Speed of Pulley Rev. per Min.	Estimated Capacity Per Hour Gallons	Weight Pounds	List Price
18	5 H. P.	14″ x 9″	14″ x 6″	30″ x 6″	150 to 160	175 to 200	1980	$300.00
20	6 H. P.	12″ x 12″	12″ x 8″	32″ x 6″	130 to 150	200 to 250	2590	375.00

IMPORTANT—See page 29 for rule for calculating required speed and size of pulleys, etc.

Horizontal Three-Roller Cane Mill with Bagasse Carrier and Feed Table



THESE attachments are Simple, Strong and Efficient. Cast iron Discs guide the Carrier Bars around End of Elevator — no hanging.

The slant of Elevator may be changed to any desired angle.

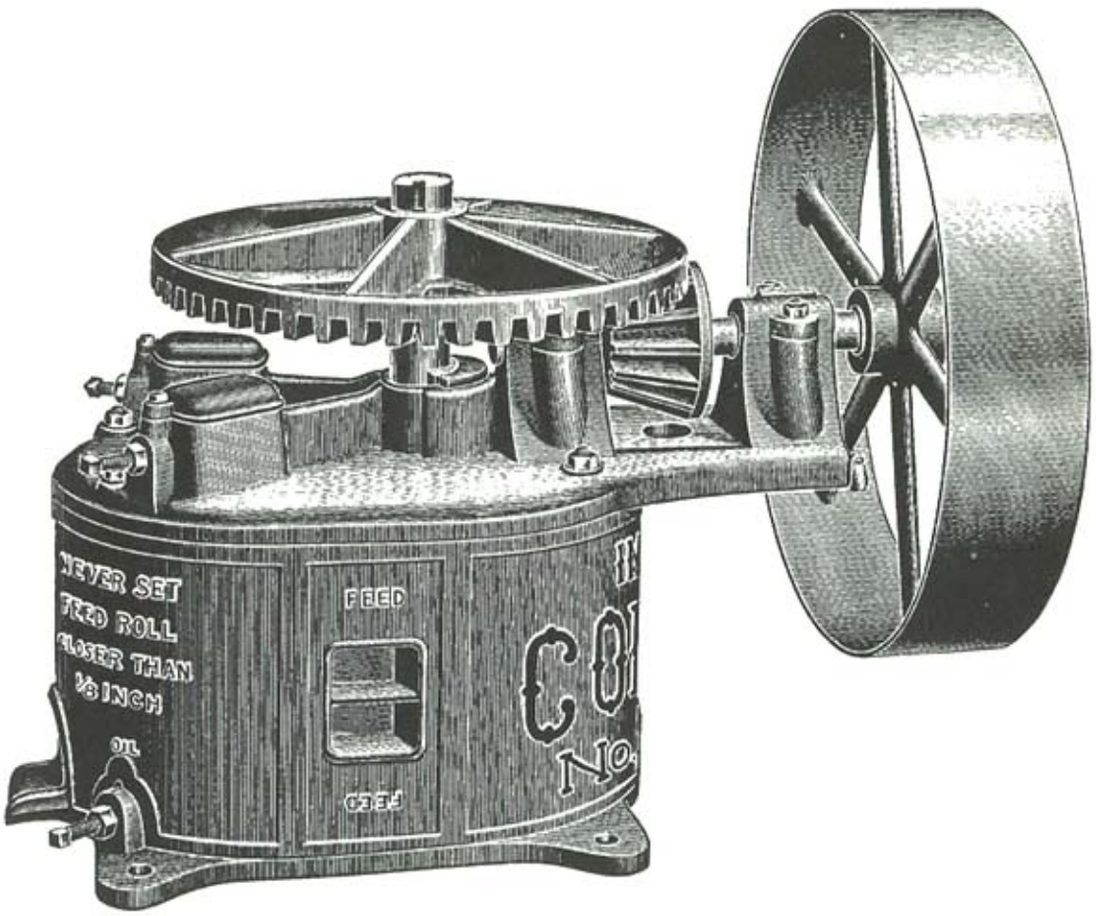
We can furnish Bagasse Carrier and Feed Table with both our No. 18 and No. 20 Cane Mills, and in any length desired.

Usual length 10 feet. Weight 377 pounds.

List price, $75.00

Improved Columbus Belt Power Cane Mills---Vertical

COMPLETELY enclosed. Light running. The most compact, strongest and neatest Vertical Belt Power Cane Mill made. Same general design as our popular animal power mills. Where less capacity and a cheaper Belt Power Mill than our Horizontal is required, these mills are recommended, and have no equal.



Three-Roller Mill

DIMENSIONS OF ROLLS

No.	Diam. Large	Diam. Small	Length of Face	Size of Pulley	Rev. Pulley Per Min.	Est. Cap. Per Hour	Weight	List Price
11	10⅛"	6⅛"	5½"	30" x 6"	72 to 80	80 gals.	800 lbs.	$125.00
12	11⅜"	6¾"	6 3/16"	30" x 6"	62 to 70	120 gals.	945 lbs.	165.00
13	13⅛"	7⅛"	7½"	30" x 6"	54 to 60	160 gals.	1130 lbs.	210.00
14	15 3/16"	8 "	9¾"	36" x 6"	50 to 55	200 gals.	1380 lbs.	240.00

Sizes 11 and 12 require 3 to 4 engine H. P.

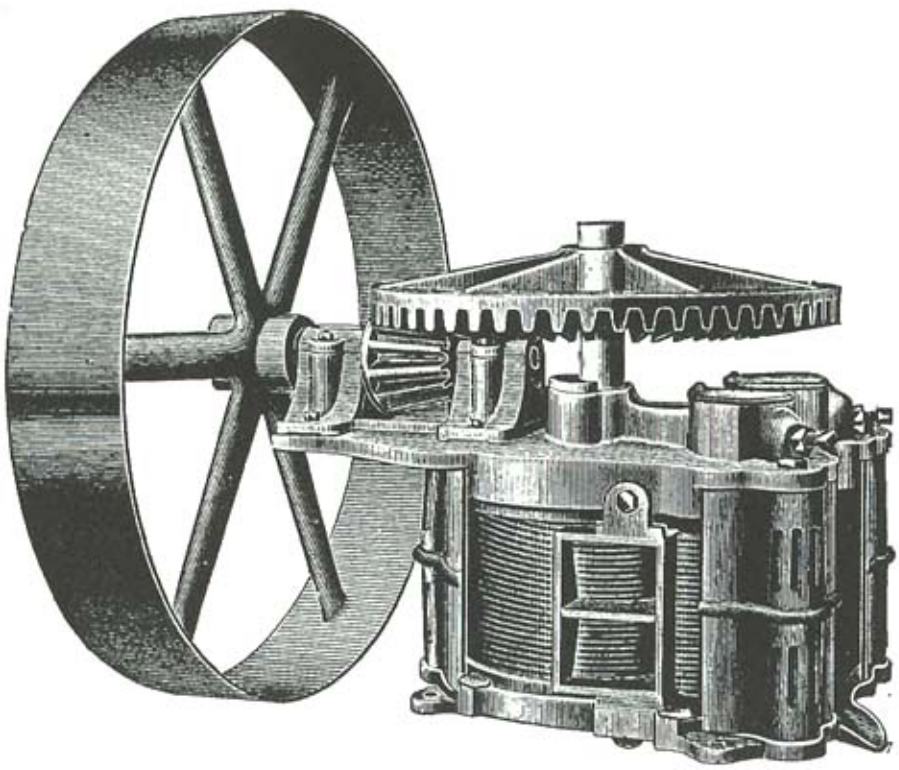
Sizes 13 and 14 require 4 to 5 engine H. P.

IMPORTANT—See page 29 for rule for calculating required speed and size pulley, etc.

Standard Three-Roller Belt Power Cane Mills---Vertical

IN our Standard Three-Roller Belt Power Cane Mills, the power mechanism is as near **perfection** as can be applied in a Cane Mill. In their construction we overcome almost entirely the constant friction incurred by Worm Gearing used in other makes of mills.

In other respects, these mills are built on the same general lines as our Standard Three-Roller Mills for animal power.



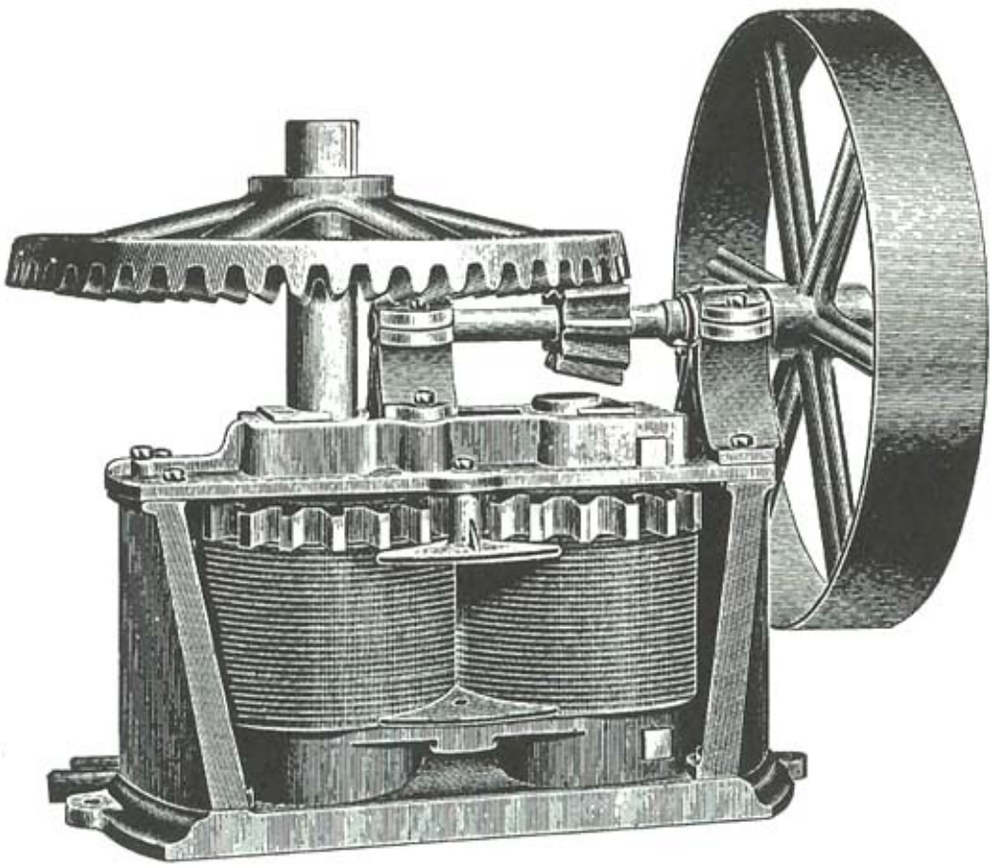
Three-Roller Mill

No.	DIMENSIONS OF ROLLS Diam. Large	Diam. Small	Length of Face	Size of Pulley	Rev. Pulley Per Min.	Est. Cap. Per Hour	Weight	List Price
0	10⅛"	6⅛"	5½"	30" x 6"	72 to 80	80 gals.	728 lbs.	$125.00
1	11⅜"	6¾"	6 3/16"	30" x 6"	62 to 70	120 gals.	868 lbs.	165.00
2	13⅛"	7⅛"	7½"	30" x 6"	54 to 60	160 gals.	1050 lbs.	210.00
3	15 3/16"	8 "	9¾"	36" x 6"	50 to 55	200 gals.	1610 lbs.	240.00

IMPORTANT—See page 29 for rule for calculating required speed and size pulley, etc.

Two-Roller Belt Power Cane Mills ---Vertical

THE unrivaled popularity of our Two-Roller Belt Power Cane Mills is due to the same points of superior construction which have won for our Three-Roller Belt Power Cane Mills the highest rank with the trade. We confidently recommend them as **the best** Two-Roller Power Cane Mills made.



Two-Roller Mill

SIZE	Size Pulley	Rev. Pulley Per Min.	Est. Cap. Per Hour	Weight	List Price
12-inch.....	30″ x 6″	65 to 75	110 gals.	1410 lbs.	$175.00
14-inch.....	36″ x 6″	55 to 65	150 gals.	1600 lbs.	200.00
16-inch.....	36″ x 6″	50 to 60	180 gals.	1790 lbs.	230.00
18-inch.....	48″ x 8″	50 to 60	210 gals.	2130 lbs.	265.00

IMPORTANT—See page 29 for rule for calculating required speed and size pulley, etc.

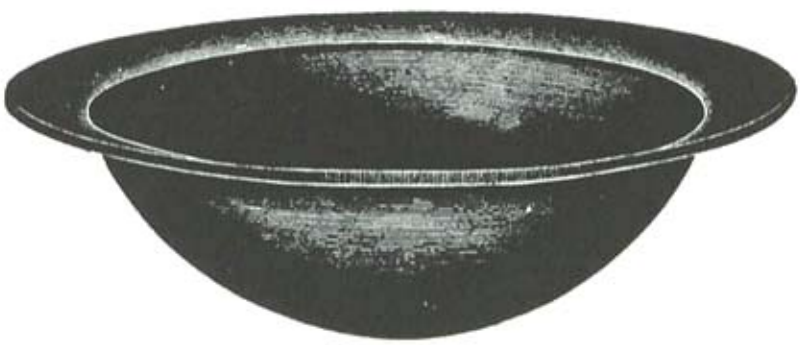
Improved Cook's Evaporator Pans

Prices of Copper and Galvanized Pans Include Two Tin Skimmers

No.	Size	Syrup Capacity Per Day	Weight, Galvanized and Copper Pans Without Strips	With Strips
2	44 ins. x 72 ins.	35 to 50 gallons	70 pounds	81 pounds
3	44 ins. x 90 ins.	50 to 75 gallons	75 pounds	102 pounds
4	44 ins. x 108 ins.	65 to 100 gallons	92 pounds	120 pounds
5	44 ins. x 126 ins.	80 to 125 gallons	108 pounds	140 pounds
6	44 ins. x 144 ins.	100 to 175 gallons	120 pounds	157 pounds
7	44 ins. x 180 ins.	125 to 200 gallons	144 pounds	190 pounds

Directions for using on page 30.

Cast Iron Syrup or Sugar Kettles



Good Thickness, Best Material and Full Capacity

Size	Diam. Over All	Depth Inside	Weight	List Price
30-gallon	39½ inches	13½ inches	138 pounds	$12.00
40-gallon	45 inches	14½ inches	243 pounds	16.00
50-gallon	50 inches	15½ inches	250 pounds	20.00
60-gallon	53 inches	16 inches	326 pounds	24.00
80-gallon	57 inches	17½ inches	408 pounds	32.00
100-gallon	59 inches	18 inches	429 pounds	40.00
150-gallon	67 inches	22 inches	750 pounds	60.00

Width Flange—30 gal., 4"; 40 to 100 gal., 4¾"; 150 gal., 5¾".

Columbus Steam Syrup Evaporator

A THOROUGHLY successful Steam Evaporator for making syrup. Best materials throughout. Neatly made and fitted up in first-class manner.

Length 11 ft.; width 44 in., outside. Depth 11 in., inside.

Lined with either Galvanized Iron or Copper.

Contains 16 sections, 162 ft., of 1-inch Galvanized Pipe. Fitted with two 1-inch Globe Valves. Steam inlet and outlet, also syrup outlet, fitted with long-threaded nipples and Galvanized lock-nuts.

The pipe sections are securely fitted with return-bends and are also braced and accurately spaced with poplar strips bolted at each end, top and bottom. These strips are fastened together with tinned head, countersunk bolts between each section. This prevents pipe from lying flat on bottom of pan.

There is a drain at bottom in one corner of box.

It is easy to loosen jam nuts and raise pipe sections for cleaning them and for washing out box.

We can furnish a Steam Trap with this Evaporator when desired, but the steam pressure and condensation can be sufficiently regulated by means of the Globe Valves, thus avoiding this extra expense.

Capacity about 250 gallons juice.

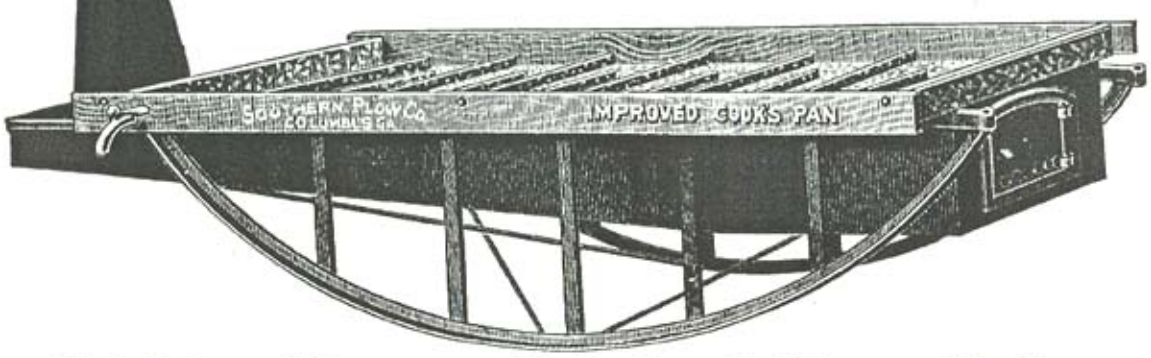
For best results, do not fill entirely. Put in about 220 to 230 gallons of juice. Four to five "cookings" per ten or twelve hours can be made. A 15 H. P. Boiler at 100 to 125 pounds steam pressure will operate our No. 18 or No. 20 Mill and Steam Evaporator. Steam should be turned on gradually; if turned on suddenly, will reduce pressure too much.

Weight, complete, 750 pounds.

Portable Rocker Furnaces

THE practical utility of the Rocker Furnace has long been recognized, hence a lengthy description is unnecessary. We use in them heavier material and make them better than anyone else, hence the users of same can rest assured that they have **the best.**

This cut represents Evaporator Pan on Furnace merely to show its completeness, but they are priced separately. **Directions for using on page 30.**



List Prices of Furnaces with Grate and Chimney—No Pan

No.	Size of Pan	Weight	List Price	No.	Size of Pan	Weight	List Price
2	44 ins. x 72 ins.	200 lbs.	$35.00	5	44 ins. x 126 ins.	250 lbs.	$55.00
3	44 ins. x 90 ins.	215 lbs.	40.00	6	44 ins. x 144 ins.	260 lbs.	60.00
4	44 ins. x 108 ins.	225 lbs.	45.00	7	44 ins. x 180 ins.	325 lbs.	80.00

For building Brick or Stone Furnace see page 31.

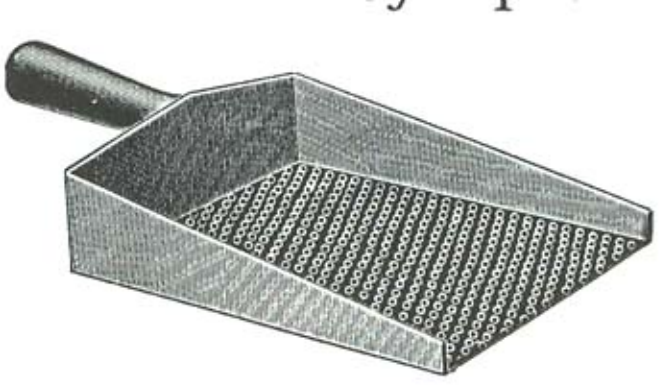
Grates for Rocker Furnaces

	Wt., Lbs.	Price
For Nos. 2, 3 and 4—18″ x 30″	50	$7.50
For Nos. 5, 6 and 7—18″ x 36″	58	8.75
Door and Frame for all sizes	37	5.75
Stack Collar for all sizes	18	2.75

Saccharometers

For testing the density of syrups .....$2.00 each
No syrup maker should be without one of these instruments.

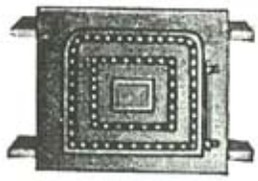
Syrup Skimmers

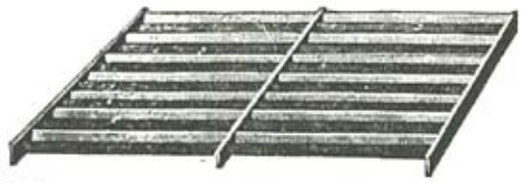


OUR special pattern Syrup Skimmer is 7 inches long by 5 inches wide, having three thicknesses of metal at the front; high sides; with sleeve, or handle socket, strongly braced. Made of heavy tin.

List Price....$4.00 per Dozen

Furnace Doors and Grates

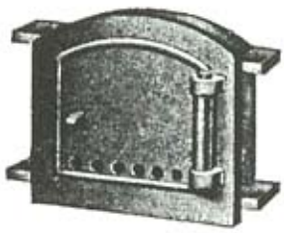




No. 10

For Pans No. 4 and smaller.

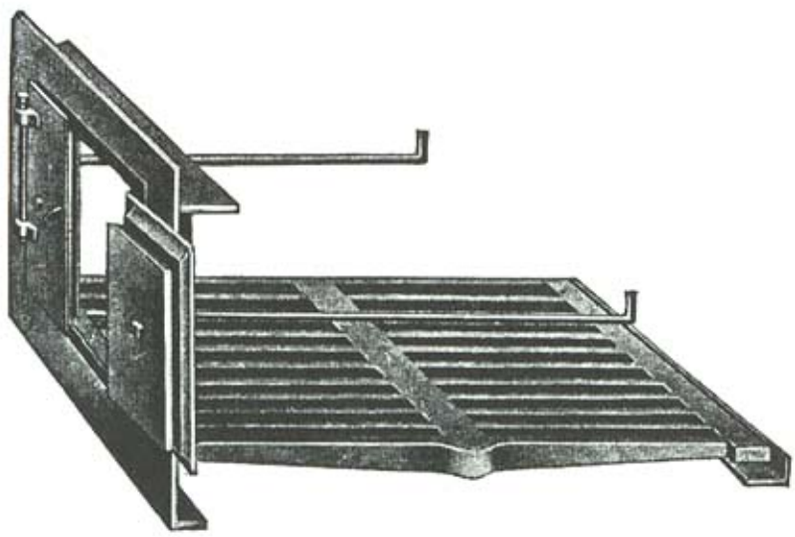
	List Price
Furnace Door and Frame, 12 inches by 12 inches, 40 pounds	$6.00
Grate for same, 18 inches by 36 inches, 45 pounds	7.00



No. 20

For Pans No. 5 and larger.

	List Price
Furnace Door and Frame, 13 inches by 16 inches, 60 pounds	$10.00
Grate for same, 20 inches by 42 inches, 68 pounds	12.00



No. 30

	List Price
Heavy Double Doors and Frame, 10 inches by 20 inches, 120 pounds	$15.00
Grate Bars, 28 inches by 36 inches, including Bearer Bar, 175 pounds	18.00

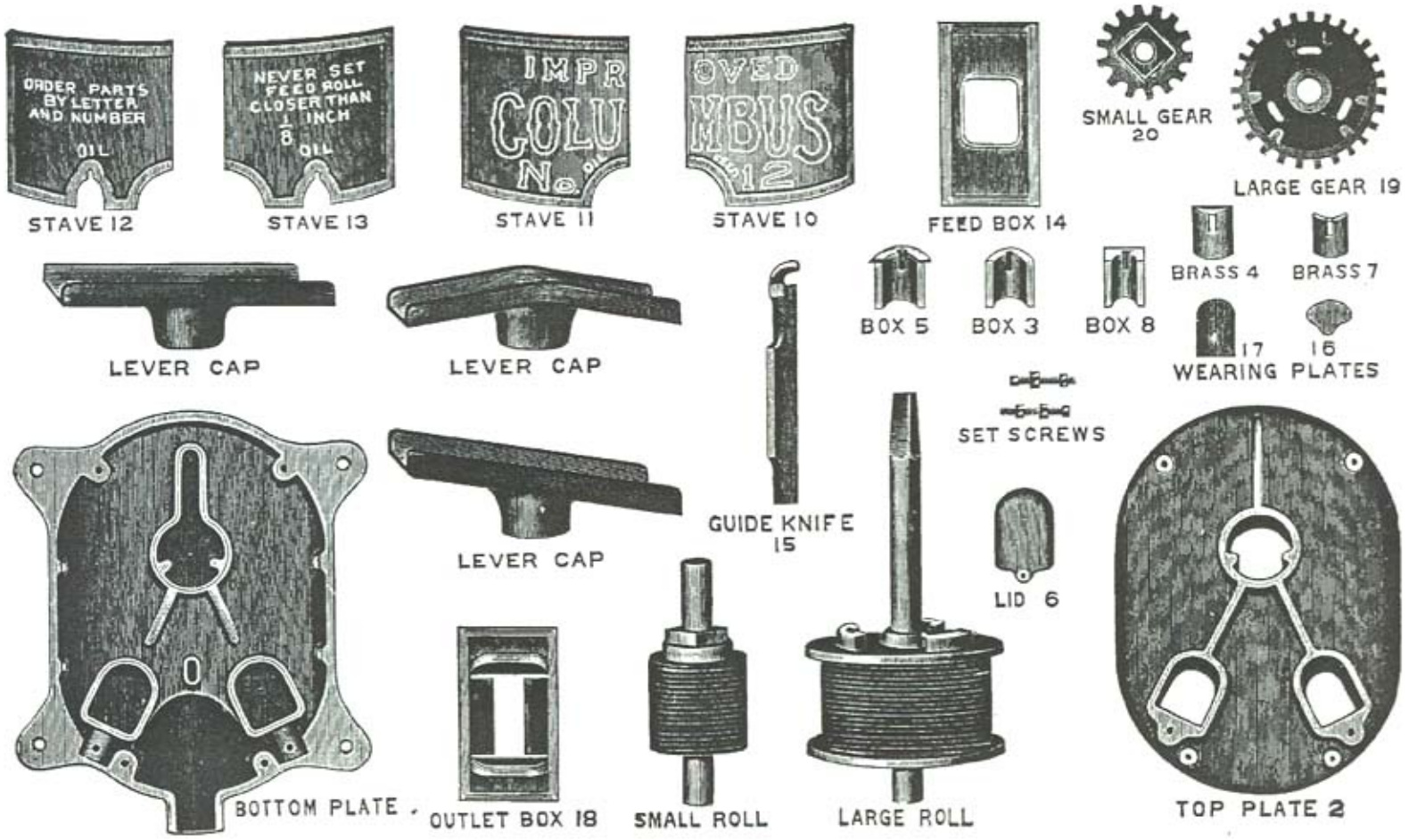
This Grate is made up of: 5—4-finger Bars, 1—2-finger Bar, 1—Angle Bearer Bar.

We can also furnish regular Grate Bars any size desired.

Parts of Improved Columbus Three-Roller Cane Mills

Made Prior to 1912

Order for Parts Must Specify Letter and Number on Same



Always Specify Letter and Number on Part Wanted

Price List of Parts—Improved Columbus Three-Roller Cane Mills

Made Prior to 1912

IMPORTANT:—Order Parts by Letter and Number DESCRIPTION	No. 11 MILL Parts are Lettered A	No. 12 MILL Parts are Lettered B	No. 13 MILL Parts are Lettered C	No. 14 MILL Parts are Lettered D	No. 15 MILL Parts are Lettered E
Bottom Plate—1	$11.00	$15.00	$20.00	$25.00	.....
Top Plate—2	9.00	14.00	18.00	22.00	.....
*Box for Bottom of Large Roll—3	.50	.70	.90	1.00	.....
*Box for Top of Large Roll—5	.50	.70	.90	1.00	.....
*Box for Top or Bottom of Small Rolls—8	.40	.50	.80	.90	
*Brass for Top or Bottom of Large Roll—4	1.00	1.20	1.50	1.70	
*Brass for Top or Bottom of Small Rolls—7	.60	.80	1.20	1.50	
Lid for Journal Boxes of Small Rolls—6	.35	.40	.50	.60	
Stave for Rear End, Right Hand—10	3.00	4.00	5.00	6.00	
Stave for Rear End, Left Hand—11	3.00	4.00	5.00	6.00	
Stave for Spout-End, Left Hand—12	3.00	4.00	5.00	6.00	
Stave for Spout-End, Right Hand—13	3.00	4.00	5.00	6.00	
Feed Box (Reversible)—14	2.00	2.40	2.60	2.80	
Guide Knife—15	2.00	2.30	2.60	3.00	
Wearing Plate for Large Journal—16	.15	.15	.15	.20	
Wearing Plate for Small Journals—17	.25	.25	.25	.30	
Outlet Box with Scrapers—18	2.00	2.40	2.60	3.00	
*Large Gear—19	5.00	6.00	8.00	10.00	
*Small Gear—20	2.50	3.00	3.50	4.50	
Lever Cap (Any Style)	4.50	6.00	9.00	12.00	
*Large Roll	22.00	30.00	42.00	50.00	.....
*Small Roll	9.50	12.00	17.00	22.00	.....
Short Set Screw	.35	.35	.35	.35	.....
Long Set Screw	.45	.45	.45	.45	.....

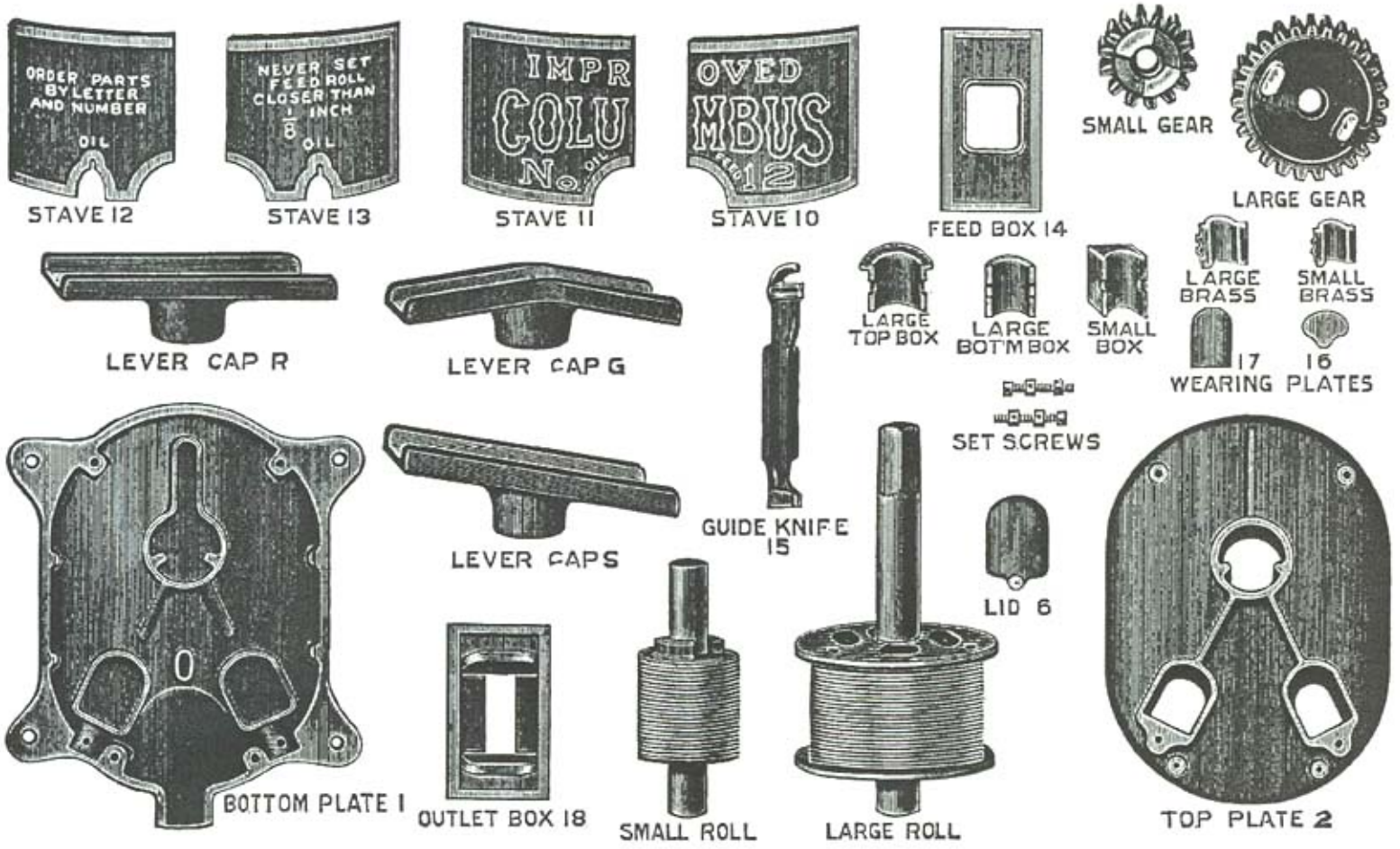
See Page 21 for Description, Numbers and Prices of Parts of No. 15 Mill.

*Rolls, Gears, Boxes and Brasses listed above **will not** fit mills made in 1912, or since that time.

Parts of Improved Columbus Three-Roller Cane Mills

Made in 1912 or Since that Time

Order for Parts Must Specify Letter and Number on Same



Always Specify Letter and Number on Part Wanted

Price List of Parts—Improved Columbus Three-Roller Cane Mills

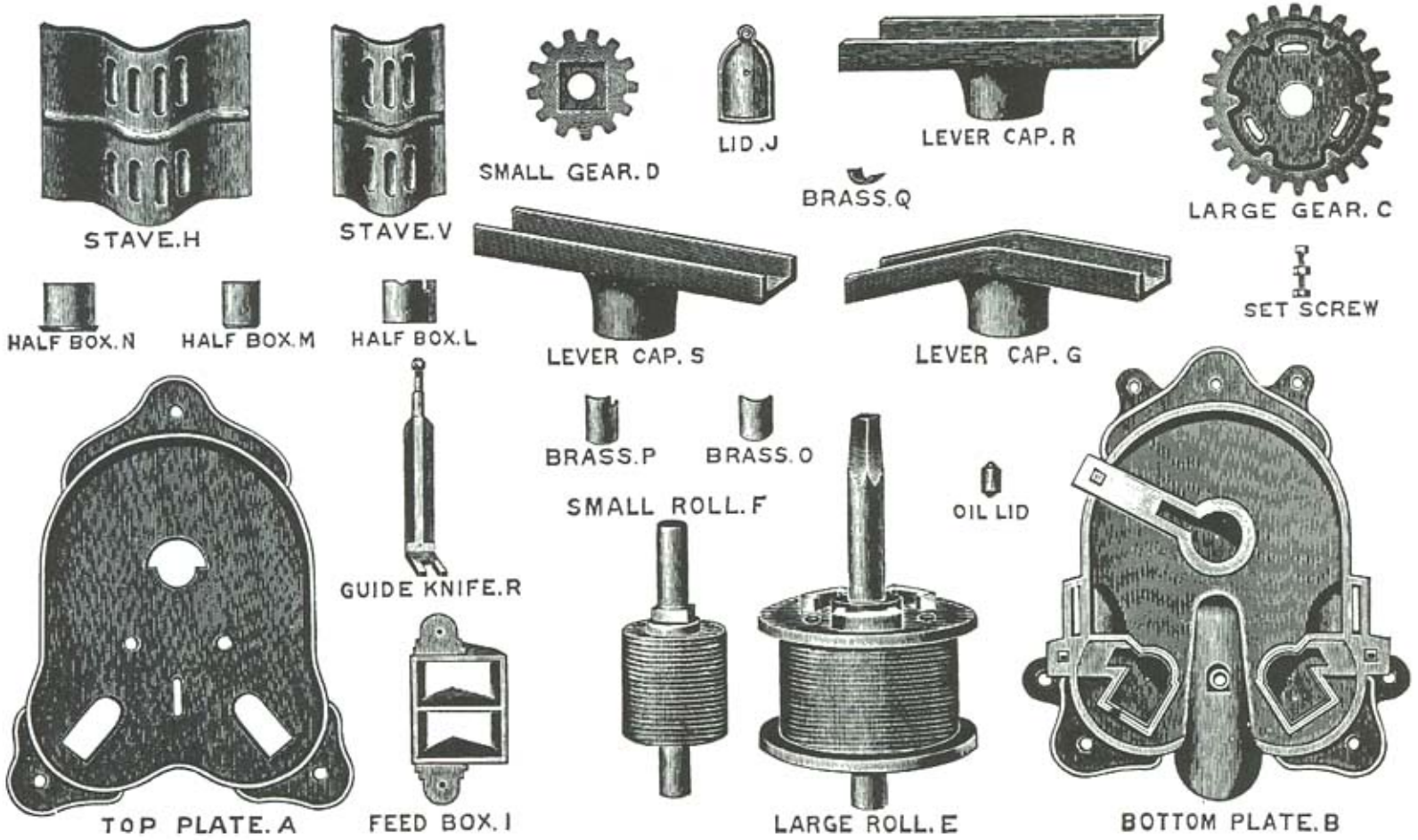
Made in 1912 or Since that Time

IMPORTANT:—Order Parts by Letter and Number DESCRIPTION	No. 11 MILL Parts are Lettered A	No. 12 MILL Parts are Lettered B	No. 13 MILL Parts are Lettered C	No. 14 MILL Parts are Lettered D	No. 15 MILL Parts are Lettered E
Bottom Plate—1	$11.00	$15.00	$20.00	$25.00	$30.00
Top Plate—2	9.00	14.00	18.00	22.00	26.00
Lid for Journal Boxes of Small Rolls—6	.35	.40	.50	.60	.80
Stave for Rear End, Right Hand—10	3.00	4.00	5.00	6.00	8.00
Stave for Rear End, Left Hand—11	3.00	4.00	5.00	6.00	8.00
Stave for Spout End, Left Hand—12	3.00	4.00	5.00	6.00	8.00
Stave for Spout End, Right Hand—13	3.00	4.00	5.00	6.00	8.00
Feed Box—14	2.00	2.40	2.60	2.80	3.20
Guide Knife—15	2.00	2.30	2.60	3.00	3.50
Wearing Plate for Large Journal—16	.15	.15	.15	.20	.30
Wearing Plate for Small Journals—17	.25	.25	.25	.30	.40
Outlet Box with Scrapers—A118, B218, C318, D418, E18	2.00	2.40	2.60	3.00	3.50
Lever Cap (Any Style)	4.50	6.00	9.00	12.00	14.00
Short Set Screw	.35	.35	.35	.35	.40
Long Set Screw	.45	.45	.45	.45	.50

PARTS BEARING NUMBERS AS BELOW ARE ONLY FOR MILLS MADE IN 1912 AND LATER

Note Carefully the Numbers on Following Parts	No.	Price	No.	Price	No.	Price	No.	Price	No.	Price
Large Roll	100	$22.00	200	$30.00	300	$42.00	400	$50.00	500	$58.00
Small Rolls	101	9.50	201	12.00	301	17.00	401	22.00	501	27.00
Large Gear	102	5.00	202	6.00	302	8.00	402	10.00	502	12.00
Small Gears	103	2.50	203	3.00	303	3.50	403	4.50	503	5.50
Box for Bottom of Large Roll	113	.50	223	.70	333	.90	443	1.00	553	1.50
Box for Top of Large Roll	105	.50	205	.70	305	.90	405	1.00	505	2.00
Boxes for Top or Bottom of Small Rolls	108	.40	208	.50	308	.80	408	.90	508	1.30
Brass for Top or Bottom of Large Roll	104	1.00	204	1.20	304	1.50	404	1.70	504	2.20
Brasses for Top or Bottom of Small Rolls	107	.60	207	.80	307	1.20	407	1.50	507	2.00

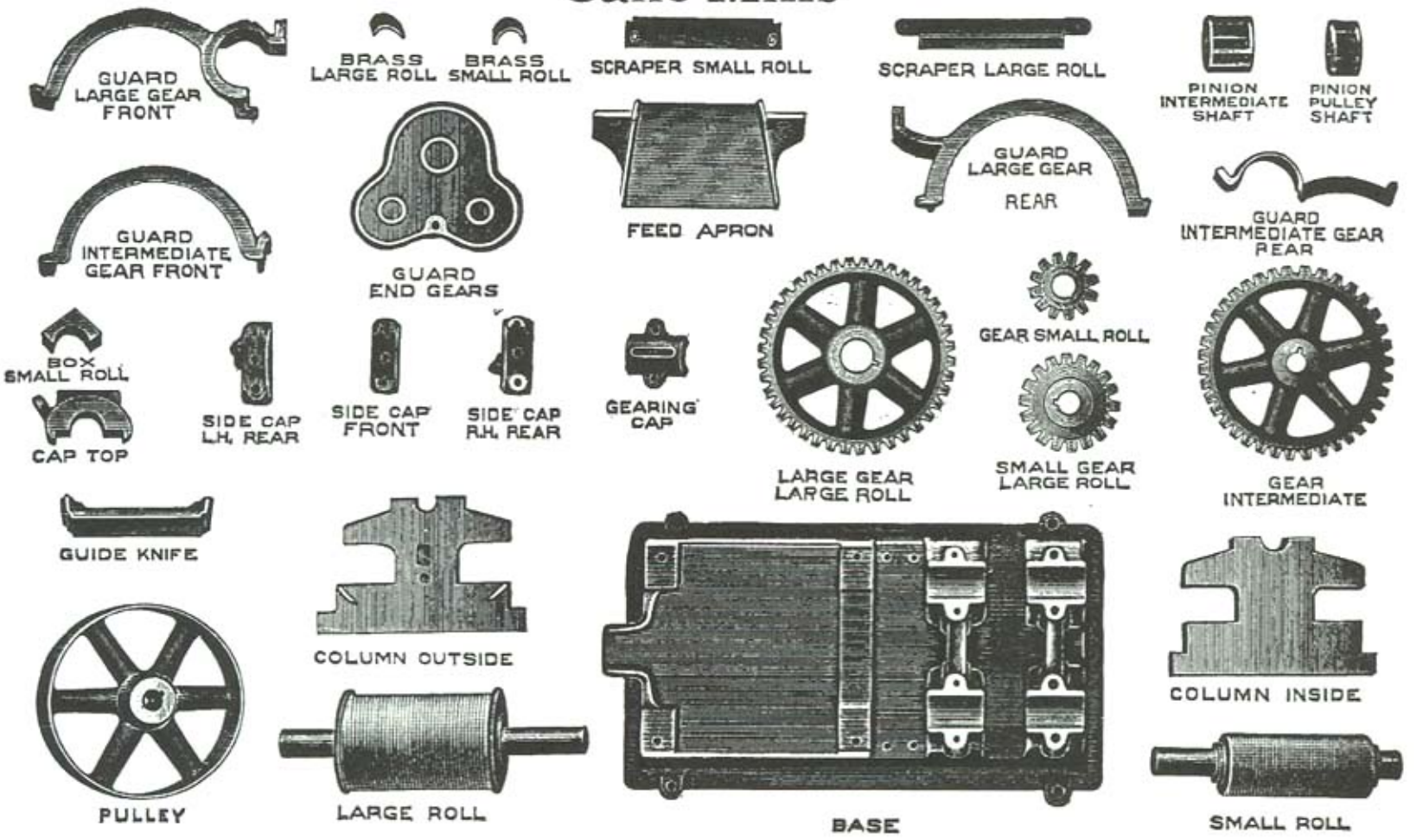
Parts of Standard Three-Roller Cane Mills



Price List of Parts—Standard Three-Roller Cane Mills

DESCRIPTION	No. 0	No. 1	No. 2	No. 3	No. 4
Bottom Plate—B	$11.00	$15.00	$20.00	$25.00	$30.00
Top Plate—A	9.00	14.00	18.00	22.00	26.00
Box—L—Bottom Large Roll	.50	.70	.90	1.00	1.50
Box—N—Top Large Roll	.50	.70	.90	1.00	2.00
Box—M—Top and Bottom Small Rolls	.40	.50	.80	.90	1.30
Brass—Q—Top Large Roll	1.00	1.20	1.50	1.70	2.20
Brass—P—Bottom Large Roll	1.00	1.20	1.50	1.70	2.20
Brass—O—Top and Bottom Small Rolls	.60	.80	1.20	1.50	2.00
Lid—J	.35	.40	.50	.60	.80
Stave—H—Large	2.00	3.00	4.00	5.00	6.00
Stave—V—Small	1.00	1.70	2.00	3.00	4.00
Feed Box—I	2.00	2.40	2.60	2.80	3.20
Guide Knife—R	2.00	2.30	2.60	3.00	3.50
Wearing Plate for Large Journal	.15	.15	.15	.20	.30
Wearing Plate for Small Journals	.25	.25	.25	.30	.40
Large Gear—C	5.00	6.00	8.00	10.00	12.00
Small Gear—D	2.50	3.00	3.50	4.50	5.50
Large Roll—E	22.00	30.00	42.00	50.00	58.00
Small Roll—F	9.50	12.00	17.00	22.00	27.00
Lever Caps—G, R and S	4.50	6.00	9.00	12.00	14.00
Set Screw	.35	.50	.50	.60	.70
Oil Lid	.05	.05	.05	.05	.05

Parts of Nos. 18 and 20 Horizontal Three-Roller Belt Power Cane Mills

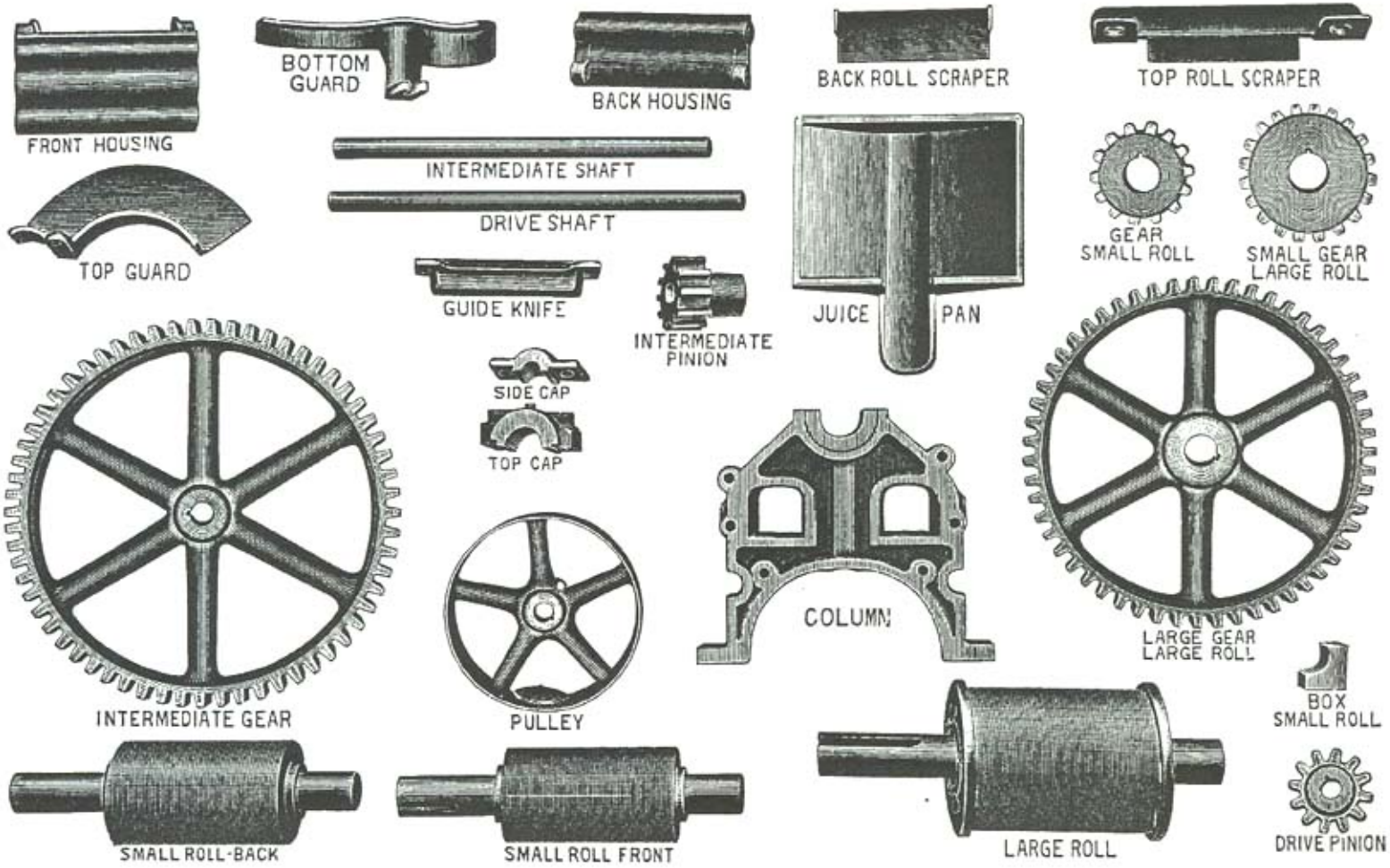


List Prices of Parts of Horizontal Three-Roller Belt Power Cane Mills

IMPORTANT—Always specify number of Mill, refer to illustration and give catalogue name of part correctly.

	FOR NO. 18 MILL		FOR NO. 20 MILL	
	Part Numbered	List Price	Part Numbered	List Price
Base	18	$80.00	20	$90.00
Large Roll	18-10	80.00	.....	90.00
Small Roll	18-11	40.00	.....	45.00
Large Gear—Large Roll	18-15	50.00	H-20-15	52.00
Small Gear—Large Roll	18-17	18.00	H-20-17	20.00
Gear—Small Roll	18-16	8.00	H-20-16	9.00
Column—Outside	18-1-G	20.00	H-20-1-G	24.00
Column—Inside	18-1	20.00	H-20-1	24.00
Side-Caps—Front	18-3	3.00	H-3	4.00
Side-Cap, R. H.—Rear	18-9-R	3.50	H-20-9-R	4.50
Side-Cap, L. H.—Rear	18-9-L	3.50	H-20-9-L	4.50
Box—Small Roll	18-8	2.00	H-20-8	2.50
Brass—Large Roll	18-6	3.00	H-20-6	3.50
Brass—Small Roll	18-6	3.00	H-20-6	3.50
Cap—Top	18-4	5.00	H-4	6.00
Pulley	18-18	20.00	H-20-18	22.50
Feed Apron	18-7	7.00	H-20-7	8.00
Guide Knife	18-5	3.00	H-5	3.00
Bearing Caps	18-2	3.00	H-2	4.00
Gear—Intermediate	18-14	30.00	H-20-14	32.00
Pinion—Intermediate Shaft	18-13	12.00	H-20-13	13.00
Pinion—Pulley Shaft	18-12	6.00	H-20-12	7.00
Guard—Large Gear—Rear	18-23	5.00	H-20-21	6.00
Guard—Large Gear—Front	18-24	5.00	H-20-24	6.00
Guard—Intermediate Gear—Front	18-21	3.00	H-20-23	4.00
Guard—End Gears	18-20	6.00	H-20-20	7.00
Guard—Intermediate Gear—Rear	18-22	3.00	H-20-22	3.50
Scraper—Large Roll	.....	1.50	.....	1.50
Scraper—Small Roll	.....	1.50	.....	1.50
Guard for End Gears with Bagasse Carrier	18-BC-10	6.00	20-BC-10	7.00
Guard for Bagasse Carrier Gears	18-BC-11	4.00	20-BC-11	5.00

Parts of Nos. 4 and 5 Horizontal Three-Roller Belt Power Cane Mills



List Prices of Parts of Horizontal Three-Roller Belt Power Cane Mills

No. 4 and No. 5

IMPORTANT—Always specify number of Mill, refer to illustration and give catalogue name and number correctly.

	FOR NO. 4 MILL		FOR NO. 5 MILL	
	Part Numbered	List Price	Part Numbered	List Price
Column, Right (see Note at bottom this page)	4-30	$20.00	5-30	$22.00
Column, Left (see Note at bottom this page)	4-31	20.00	5-31	22.00
Bearing Caps	4-3	3.00	5-3	3.50
Top Caps	4-4	5.00	5-4	5.00
Guide Knife	4-5	2.00	5-5	2.00
Small Roll, Front (Feed)	4-6	23.00	5-6	25.00
Small Roll, Back (Discharge)	4-7	25.00	5-7	27.00
Box, Small Roll	4-8	2.50	5-8	3.00
Large Roll	4-10	40.00	5-10	44.00
Housing, Front (see Note at bottom this page)	4-32	4.00	5-32	4.50
Housing, Back (see Note at bottom this page)	4-33	3.00	5-33	3.50
Juice Pan	4-13	8.00	5-13	9.00
Large Gear, Large Roll	4-14	20.00	5-14	22.00
Small Gear, Large Roll	4-15	10.00	5-15	11.00
Gear, Small Roll	4-16	6.00	5-16	7.00
Intermediate Pinion	4-17	6.00	5-17	7.00
Pulley	4-18	10.00	5-18	11.00
Intermediate Shaft	4-19	6.00	5-19	7.00
Large Intermediate Gear	4-20	20.00	5-20	22.00
Drive Pinion	4-21	6.00	5-21	7.00
Drive Shaft	4-22	6.00	5-22	7.00
Gear Guard, Top	4-23	2.00	5-23	2.50
Gear Guard, Bottom	4-24	2.00	5-24	2.50
Scraper for Large Roll	4-34	2.00	5-34	2.50
Scraper for Small Roll	4-35	1.50	5-35	2.00
NOTE—On Mills made in 1921 Parts are numbered as follows:				
Column, Right	4-1	20.00	5-1	22.00
Column, Left	4-2	20.00	5-2	22.00
Housing, Front	4-11	4.00	5-11	5.00
Housing, Back	4-12	3.00	5-12	4.00

Repairs for Vertical Belt Power Cane Mills, Three-Roll

	Pulley	Bevel Gear	Pinion
For No. 11 and No. 0	$14.00	$20.00	$4.00
For No. 12 and No. 1	14.00	20.00	4.00
For No. 13 and No. 2	14.00	20.00	4.00
For No. 14 and No. 3	29.00	45.00	5.00

Repairs for Two-Roll Cane Mills

Both Belt and Animal Power

	Pulley	Top Plate	Bottom Plate	Staves or Ends	Feed Apron (2 Pcs.)	Rolls	Lever Caps	Babbitted Boxes
For 12″ Mill	$14.00	$22.00	$31.00	$ 6.00	$1.00	$25.00	$5.00	$2.50
For 14″ Mill	29.00	25.00	33.00	7.50	1.30	32.00	5.00	2.50
For 16″ Mill	29.00	27.00	40.00	8.50	1.50	37.00	5.00	2.50
For 18″ Mill	56.00	34.00	44.00	10.00	1.80	48.00	7.00	3.00

CAUTION

THE operation of a Cane Mill is very simple, and specific directions are unnecessary.

However, the greater percentage of breakage of and dissatisfaction with Cane Mills is caused by being improperly set up and operated. Therefore, care should be taken in setting up Mill. It should be placed on a firm, level foundation, and securely bolted down.

The wooden lever or sweep to be used should be intelligently selected, properly fitted and rigidly bolted to the lever cap. This lever should not be too heavy—neither of itself nor by additional counter-balance weight placed on it. The hitch-end of lever should be proper height from the ground, so that the team when pulling will not have a tendency to pull the lever up nor down.

More breakage of lever caps of Cane Mills is caused by using levers too heavy than by any other cause.

Use care in keying the rolls. Be sure they are set same distance apart, both top and bottom.

With three-roller Mills, do not set feed roll closer than 1/8 inch—if a little more space, all the better. The discharge roll may be set closer.

The Guide Knife of a Cane Mill is a most vital part, and the duty it performs is very essential to satisfactory working of the Mill. It is important, therefore, that the Guide Knife fits snugly against Feed Roll along the entire face of the Roll. It is expected that a Guide Knife will wear pretty fast; consequently, it should be constantly watched and when it becomes worn so that it does not scrape the Feed Roll perfectly it should be replaced with a new one. We cannot stress this most important feature too highly, because, as a rule users of Cane Mills do not pay sufficient attention to it.

Do not allow the ground cane nor trash of any kind to accummulate in the Mill.

Use axle grease or heavy oil on all bearings once a day; and, occasionally, put a small quantity of axle grease on cogs.

IMPORTANT
Belt Power Cane Mills

Correct speed of a Belt Power Cane Mill is essential to satisfactory results.

In ordering, therefore, if in doubt about your power equipment driving the Mill at proper speed, then give us diameter and speed of your driving pulley. We can equip mill with pulley of size required.

If special size Pulley is required, it will take a special price, but only the extra cost beyond price of regular pulley will be charged for.

RULES FOR CALCULATING DIAMETER AND SPEED OF PULLEYS

TO FIND SIZE OF DRIVING PULLEY: Multiply the diameter of the **driven** by the number of its revolutions and divide the product by the number of revolutions of the **driver.** The quotient will be the diameter of the driver.

(*Continued on next page*)

TO FIND THE SIZE OF THE DRIVEN PULLEY: Multiply the diameter of the **driver** by the number of its revolutions and divide the product by the number of revolutions of the **driven.** The quotient will be the diameter of the driven.

TO FIND THE SPEED OF DRIVEN PULLEY: Multiply the diameter of the **driver** by the number of its revolutions and divide the product by the diameter of the **driven.** The quotient will be the number of revolutions of the driven.

FOR OPERATING SYRUP EVAPORATOR PANS

An Evaporator Pan should fit top of Furnace snugly. No heat should be allowed to escape at ends or along the sides, which will damage the wooden side-rails and cause leakage.

Setting an Evaporator level is the best practice, although some people prefer them very slightly inclined towards chimney.

The best plan for levelling an Evaporator is to simply set it on the furnace and put some water in it.

When ready to begin cooking, turn juice into Pan for about half of its length, having water in the rest.

Do not skim the first two bars oftener than four to six times a day. Skim the other bars often and thoroughly.

When this juice begins to slightly resemble syrup, drive out the water and turn juice into Pan for its full length. Block off the last two bars from the rest, however. Continue to cook and skim thoroughly until syrup in last two bars has reached proper consistency and purity; then draw it off, turning into these bars partially cooked juice right behind the syrup rake or paddle.

Continue the operation in this manner, and the best syrup will be produced.

Evaporator Pans are furnished with two Skimmers. One of these is intended to be used exclusively in the finishing syrup; the other exclusively in the greener juice.

The inflow of juice may be constant, if properly regulated. But the best syrup cannot be made when it is allowed to flow out constantly. Pure, high quality syrup can only be made when it is cooked and drawn off in "runs," as above explained.

FOR SETTING UP AND OPERATING ROCKER FURNACES

The rockers should be set in trenches so the furnace will be steady.

Preferably, the furnace should be set level; although it may be inclined very slightly towards the chimney-end—barely enough to cause the juice to flow very slowly.

A Rocker Furnace should be lined inside with brick on edge all the way up to the top of the furnace. Care should be taken to have the top of the Furnace smooth along both sides. A very thick lining of clay mortar (preferably fire-clay) may be used, but it is unsafe and not usually satisfactory.

Sand, fire-clay or ashes should be spread over bottom of furnace all the way up to the stack so as to prevent excessive heat from burning or warping it.

(*Continued on next page*)

Sprinkle ashes or fine sand all along the sides and across each end of furnace, about one-half inch deep, or sufficiently so the Evaporator Pan will embed itself into it and thus make a tight joint, thereby conserving heat and preventing it from damaging the wooden sides of Pan, causing leakage.

Give plenty of draught so fire will burn briskly.

FOR BUILDING AND OPERATING BRICK OR STONE FURNACE

A brick or stone furnace should be built about two feet high. The walls should be at least eight inches thick at bottom, but may taper to three or four inches at top.

Width of furnace should not be over forty inches outside to outside at top. If not over thirty-eight inches, that is sufficient.

A chimney of suitable inside diameter and height, so as to give ample draught, should be built. Or, a metal stack may be used.

A metal bar should be placed across furnace at each end to afford a support for ends of Evaporator Pan.

A cast iron door, such as illustrated on page 17, should be built into furnace. They give better satisfaction than an improvised door.

Two or more metal bars should be built into furnace eight to ten inches from bottom—the first about six inches from door. As many of these as desired may be used and placed close enough together so as to form a grate. Or, a regular grate, or grate bars, may be used, in which case it will be necessary to place only one metal bar across furnace—one end of same resting on door-frame.

Bottom of furnace should be dug out a few inches so as to afford ample ash pit. And the bottom of furnace should slant from back end of grate toward chimney, so that throat of furnace at chimney will be only five to eight inches deep.

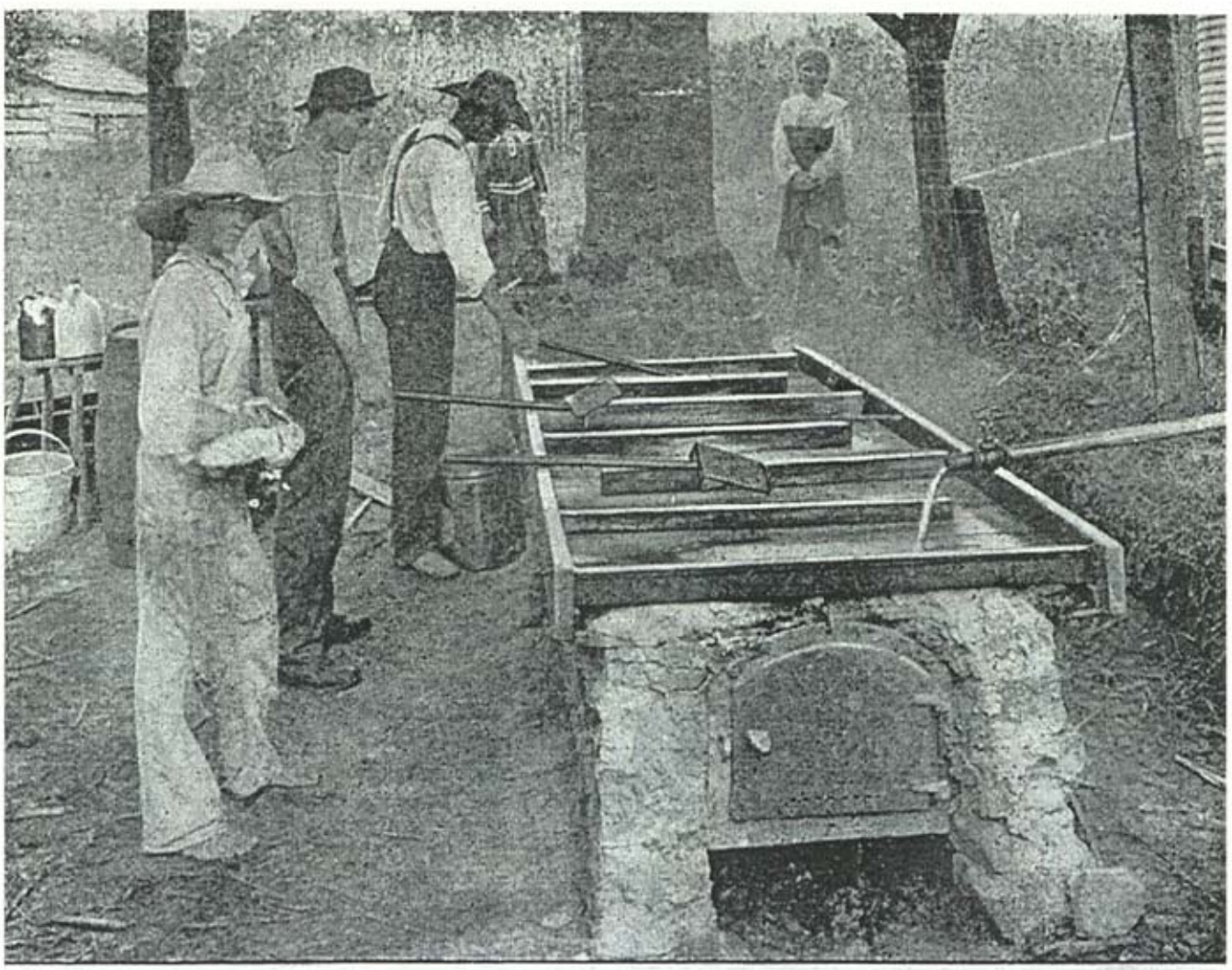
Top of Furnace should be smooth and level along each side and across ends. A good method for levelling top of Furnace is to place Evaporator Pan on it and then put some water into the Pan.

Sand or ashes should be sprinkled about half inch deep all around top of Furnace so Pan will embed itself into it, forming a tight joint so heat will not escape or damage wooden sides of Pan.

Keep fire burning briskly.

We warrant our Cane Mills to do good work, and as much of it as any mill of corresponding sizes.

They are amply strong for the power indicated; and we warrant them, for the first season, against breakage resulting from manifest defects in material or workmanship.



A Southern Plow Company Cane Mill and Evaporator in Operation near Cullman, Ala.