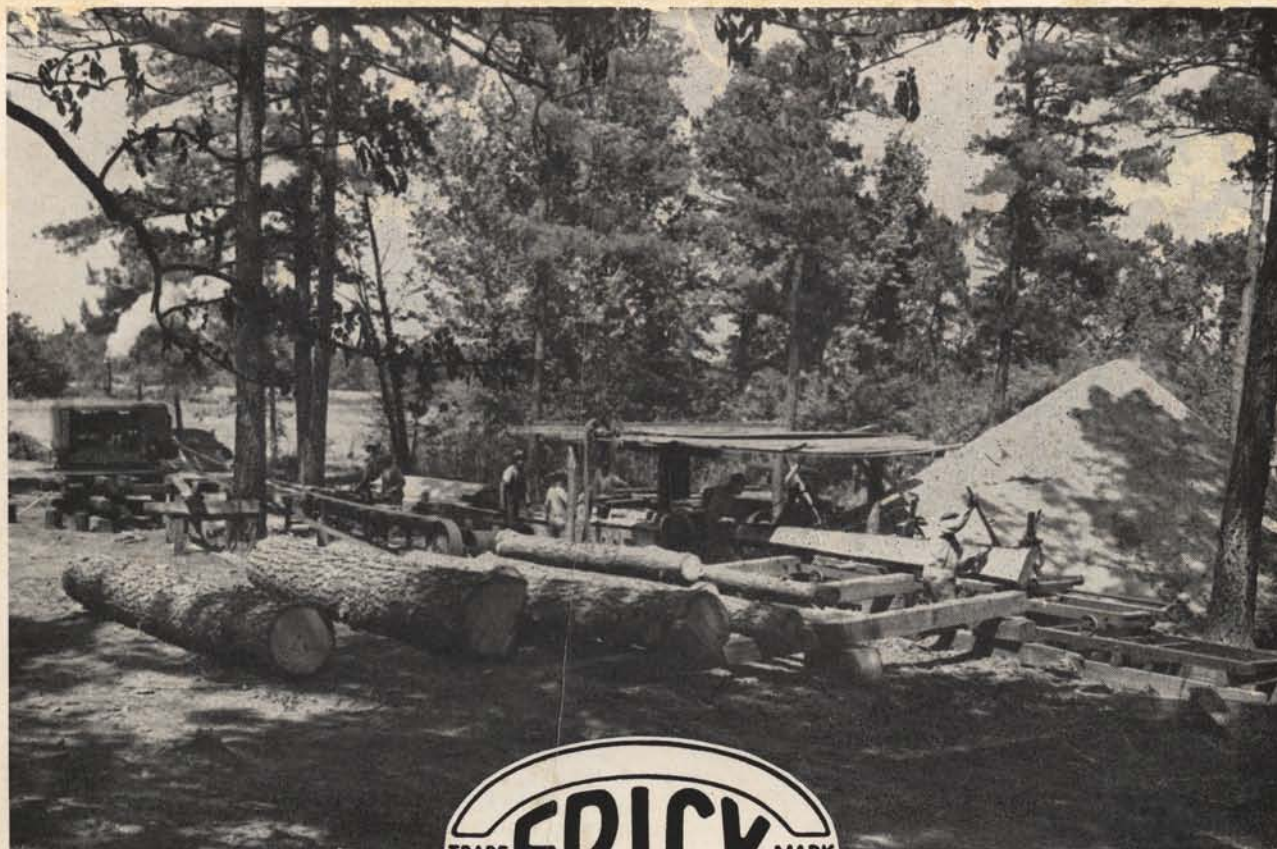




PORTABLE
SAWMILLS

Catalog No. 75-E

**Edgers,
Trimmers
& Accessories**



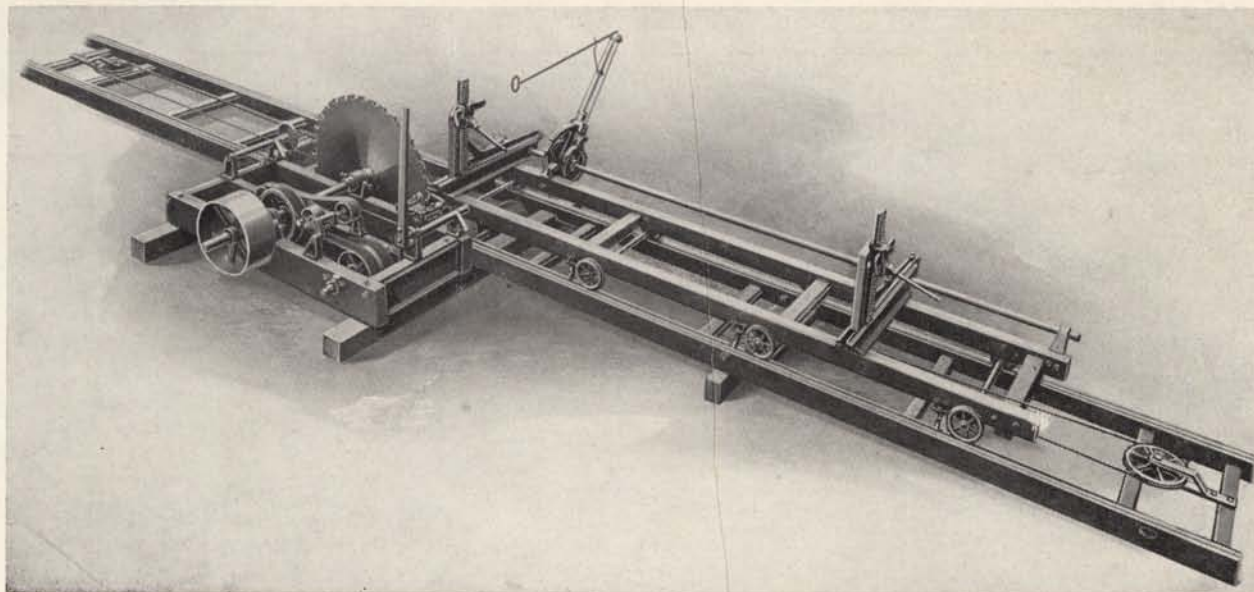
PORTABLE

SAWMILLS

Edgers, Trimmers & Accessories

Catalog No. 75-E

THIS machinery offers the sawmill man all that long experience, up-to-the-minute design, skilled workmanship and improved materials can build into quality equipment. Frick Company has been building sawmill equipment since 1853, and is intimately acquainted with the problems and needs of both mill owners and operators. Now in use throughout the civilized world, Frick sawmills, edgers, trimmers and accessories are the recognized standard of the industry.



The Frick No. 00 Belt Feed Sawmill

"TRACTOR SPECIAL"

(See No. 0 Mill in Center of this Bulletin)

To meet the demand for a low-priced, practical mill, suitable for light tractor power, the No. 00 was designed and placed on the market. It met with instant approval for speed, good clean work and low operating cost. It is light in weight, durable, quick acting and accurate cutting. Easily and quickly set up and taken down, it eliminates much labor and expense in making frequent sets. Furnished regularly with 10-foot carriage and 35-foot ways, 15-foot carriage and 45-foot ways, or 20-foot carriage and 55-foot ways, as required. Features include Frick patented belt feedworks with 3-inch belts; cable drive with horizontal sheave wheels; self-aligning Timken roller mandrel bearings; Hyatt roller bearings on carriage axles; two

steel headblocks having ells with detachable rack bars with provisions for adjustment; two upper dogs; double ratchet setworks; mud sills; one cant hook, and necessary tools.

The above illustration is so small that it hardly does justice to the sturdy construction, quality materials and good workmanship which make up this efficient sawmill. The mill is built for fast, accurate work and a lot of it.

Extra attachments, such as binding pulley and frame, lumber trucks, parallel knees, foot power receder, saw-dust drag, gauge wheel, Knight or boss type dogs, extension mandrels, etc., can be furnished at extra cost.

Specifications

Will swing 58-inch saw.

Husk—Length 6 feet 9 inches; width 2 feet 11 inches.

Mandrel—2 $\frac{3}{8}$ -inch dia., 52 inches long, with 4 $\frac{1}{4}$ -inch collar, standard head.

Mandrel Bearings—Timken Roller, self-aligning.

Mandrel Pulley—22-inch dia., 8-inch face; other sizes to suit power.

Feed— $\frac{1}{2}$ -inch to 4-inch; gigback $\frac{1}{2}$ -inch to 8-inch; 3-inch belts.

Carriage—Width 30 inches; timbers 3 $\frac{1}{2}$ inches x 4 $\frac{1}{2}$ inches; in standard 10-foot and 15-foot sections.

Carriage Axles and Wheels—Axles 1 $\frac{1}{2}$ -inch dia., equipped with wheels 7-inch dia., pressed on. 3 sets axles and wheels under 10-foot carriage; 4 sets under 15-foot carriage.

Carriage Axle Bearings—Hyatt Roller, with side adjust-

ment.

Set Shaft—1 $\frac{1}{8}$ -inch dia., full length.

Setworks—Combined improved type, with hand receder and machine-cut teeth, and pawls carefully ground for accurate setting in as small as 32nds of an inch.

Headblocks—Steel, opening 32 inches. Fitted with upper dog and ells with detachable rack bars. (See cut No. 780, page 8.)

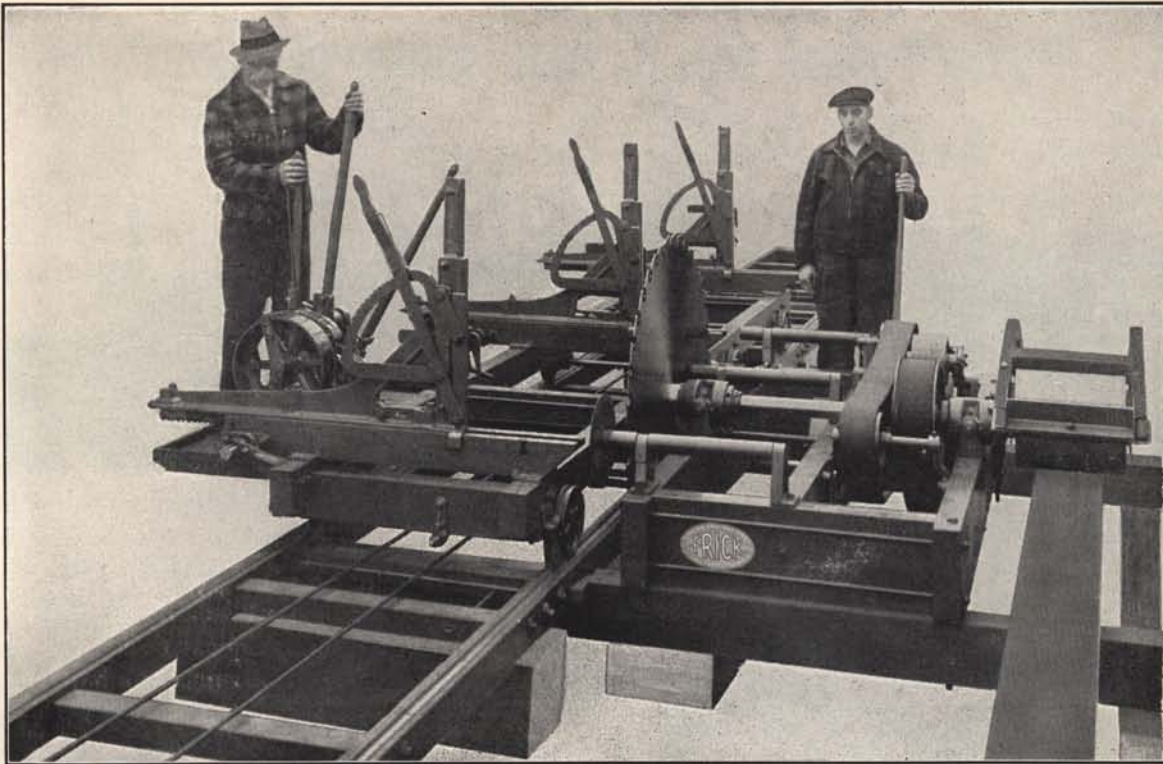
Ways—Timbers 3 inches x 4 $\frac{1}{2}$ inches. Standard lengths in 5-foot, 10-foot and 15-foot sections.

Cable Drive— $\frac{3}{8}$ -inch wire cable; sheave wheels set horizontally.

Approx. Weight—15-foot mill, 3000 lb. 20-foot mill, 3500 lb.

Power—25 to 50 Brake Horsepower.

Capacity—4M to 10M daily, depending upon power used.



The Frick No. 01 Belt Feed Sawmill

(See No. 0 Mill in Center of this Bulletin)

The No. 01 Mill is our medium size Mill for steam power and the larger size power units. Very complete in every respect, and built to stand hard service, this mill is of large capacity. Furnished regularly with 15-foot carriage and 45-foot ways, or 20-foot carriage and 55-foot ways or 25-foot carriage and 65-foot ways, or 30-foot carriage and 75-foot ways, as required. Features include Frick patented belt feed works with 5-inch belts; cable drive with horizontal sheave wheels; self-aligning Timken roller mandrel bearings; Hyatt roller bearings on

carriage axles; two steel headblocks and ells having cut steel detachable rackbars with provision for adjustment; two upper dogs; improved combined setworks as described on page 11; mud sills; two cant hooks, and necessary tools.

Extra attachments such as lumber truck, parallel knees, foot power receder with automatic trip, sawdust drag, gauge wheel, Knight or boss type dogs, double-acting setworks, extension mandrel, etc., can be furnished at extra cost.

Specifications

Will swing 60-inch saw.

Husk—Length 7 feet 11 inches. Width 3 feet 7 $\frac{3}{4}$ inches.

Mandrel—2 $\frac{5}{8}$ -inch diameter, 72 inches long with collar 4 $\frac{3}{4}$ -inch diameter.

Mandrel Bearings—Timken Roller, self-aligning.

Mandrel Pulley—Standard 24-inch diameter, 12-inch face, other sizes to suit power.

Feed— $\frac{1}{2}$ -inch to 5-inch; gigback $\frac{1}{2}$ -inch to 10-inch per revolution of saw; 5-inch Belts.

Carriage—Width 36 $\frac{1}{8}$ inches. Timbers 3 $\frac{1}{2}$ inches x 5 $\frac{1}{2}$ inches. Standard length in 10-foot and 15-foot sections.

Carriage Axles and Wheels—Axles 1 $\frac{1}{8}$ -inch diameter, equipped with wheels 8-inch diameter, pressed on. Three sets axles and wheels under 10-foot carriage. Four sets under 15-foot carriage.

Carriage Axle Bearings—Hyatt Roller, with side adjustment.

Set Shaft—1 $\frac{1}{4}$ -inch diameter—full length.

Setworks—Combined improved type, with hand receder and machine-cut teeth, and pawls carefully ground for accurate setting in as small as 32nds of an inch.

Headblocks—Steel, opening 40 inches. Fitted with upper dogs and ells with cut steel detachable rackbars. (See cut No. 780, page 8.)

Ways—Timbers—3 $\frac{1}{2}$ inches x 5 inches. Standard lengths in 5-foot, 10-foot and 15-foot sections.

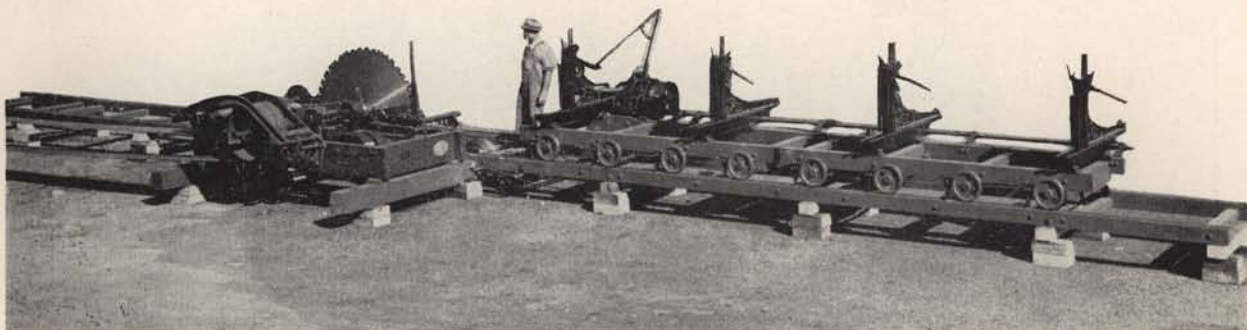
Cable Drive— $\frac{1}{2}$ -inch wire cable. Sheave wheels set horizontally.

Approximate Weight—20-foot mill, 5500 lb. 25-foot mill, 6000 lb.

Power—50 to 100 Brake Horsepower.

Capacity—6M to 15M daily, depending upon power used.

The Frick No. 1 Belt Feed Sawmill



The No. 1 Mill is designed for handling large timber. The horsepower requirements for operating this mill will range from 60 to 125, depending upon the capacity desired. The frames are of such size and so designed as to give the greatest strength to the mill without its becoming cumbersome or unwieldy to handle.

This mill is offered in the following combinations:

- 15-ft. carriage, 45-ft. ways
- 20-ft. carriage, 55-ft. ways
- 25-ft. carriage, 65-ft. ways
- 30-ft. carriage, 75-ft. ways
- 35-ft. carriage, 85-ft. ways

Features of the No. 1 mill include Frick belt feed with 6" belts; cable drive with horizontal sheave wheels; self-aligning Timken roller mandrel bearings; Hyatt roller bearings on the carriage axles; Fafnir self-aligning ball bearings on feed shaft and

gear end of drum shaft; hardened cut-steel feed pinion; cut gear on drum shaft; steel headblocks, with ells having cut-steel detachable rack bars with provisions for adjustment; hardened cut-steel pinions for set shaft; upper dogs; and improved combined setworks, as illustrated on page 10. Mud sills, two cant hooks, and necessary tools are included as standard equipment.

Because heavy logs are usually sawed by this mill, each 10-ft. carriage section is fitted with four sets of axles and wheels, and each 15-ft. carriage section is fitted with six sets, as standard equipment.

Extra attachments, furnished at additional cost, include such accessories as lumber rolls, taper attachment, foot power receder with automatic trip, double-acting setworks (as described on pages 11 and 14), gauge wheel, sawdust drag, log turner, top rig, and Knight plain or quarter sawing, or Boss type, dogs.

Specifications

Will swing 68-inch saw.

Husk—Length, 9 feet; Width, 4 feet 4 inches.

Mandrel—3-inch diameter, 78 inches long, with collar of 6-inch diameter.

Mandrel Bearings—Timken Roller, self-aligning.

Mandrel Pulley—Standard 24-inch diameter, 12-inch face. other sizes to suit power.

Feed— $\frac{1}{2}$ -inch to $6\frac{3}{4}$ -inch. Gigback, $\frac{1}{2}$ inch to $13\frac{1}{2}$ inches, each revolution of saw; 6-inch Belts.

Carriage—Width, 40 $\frac{1}{2}$ inches. Timbers 4 inches x 6 inches. Standard length in 10-foot and 15-foot sections.

Carriage Axles and Wheels—Axles $1\frac{5}{8}$ -inch diameter, equipped with wheels 10-inch diameter, pressed on. Four sets of axles and wheels under 10-foot carriage; six sets under 15-foot carriage.

Carriage Axle Bearings—Hyatt Roller, with side adjustment.

Set Shaft—2-inch diameter—full length.

Setworks—Combined improved type, with hand receder and machine-cut teeth, and pawls carefully ground for accurate setting to 32nds of an inch.

Headblocks—Steel, opening 44 inches from saw, fitted with upper dogs and ells with cut steel detachable rackbars and hardened cut steel pinions.

Ways— $3\frac{1}{2}$ x $5\frac{1}{2}$ inches. Standard length in 5-foot, 10-foot and 15-foot sections.

Cable Drive— $\frac{1}{2}$ -inch wire cable. Sheave wheels set horizontally.

Approximate Weight—20-foot mill, 7000 lb.

Power—60 to 125 Brake Horsepower.

Capacity—7M to 25M daily, depending upon power used.

The Frick Top Rig Attachment

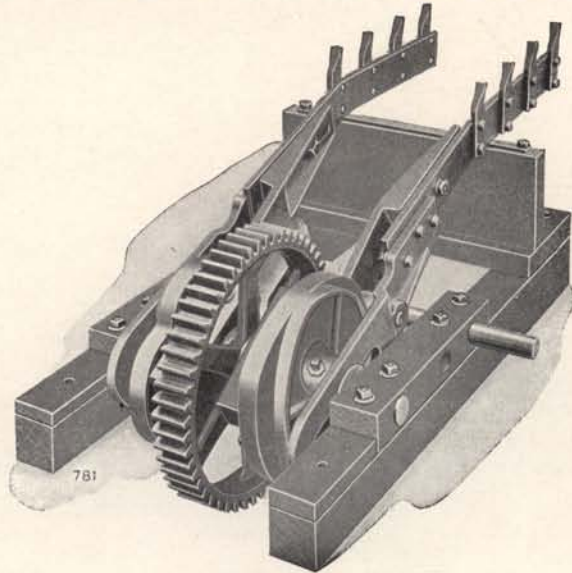
When sawing large timber, a very decided advantage is obtained by using a top rig. The saws being smaller in diameter, the use of a thinner gauge blade is possible, resulting in a saving in power and valuable lumber. The top rig can be furnished with the Frick No. 1 standard husk without change, or any No. 1 or 2 mill now out can be changed to a top rig mill. The main driving pulley is carried on an extension mandrel and an out-board roller bearing, identical in type and size with those furnished regularly with the mill. The top saw mandrel is 2 3/4" in diameter and is supported on Timken tapered roller bearings of the same construction as the main saw mandrel bearing illustrated on page 6 of this catalogue. It is moved toward or away from the main saw by means of the tail screws and thumb nuts, as shown, affording a convenient adjustment.

This attachment as regularly furnished includes belt for driving top saw, also extension mud sills and out-board bearing support. A 30-inch 9-gauge solid top saw is recommended. Approximate shipping weight, 1500 pounds.

Log Turner

A log turner is of great convenience where the timber is heavy, and is a great time and labor saver.

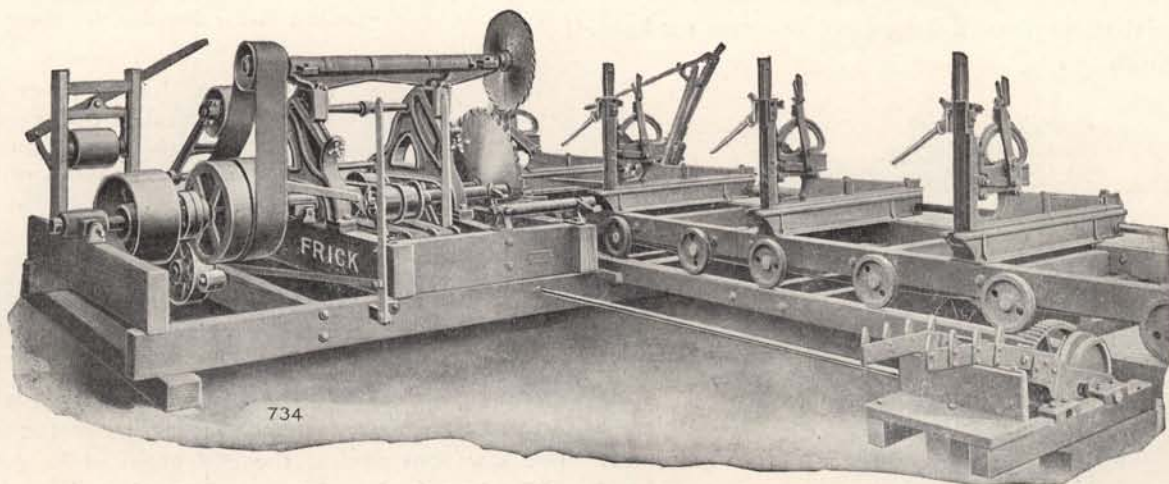
The Frick log turner has a gear box consisting of a heavy wood frame. The kickers are of high grade steel. The turner is connected to the husk through



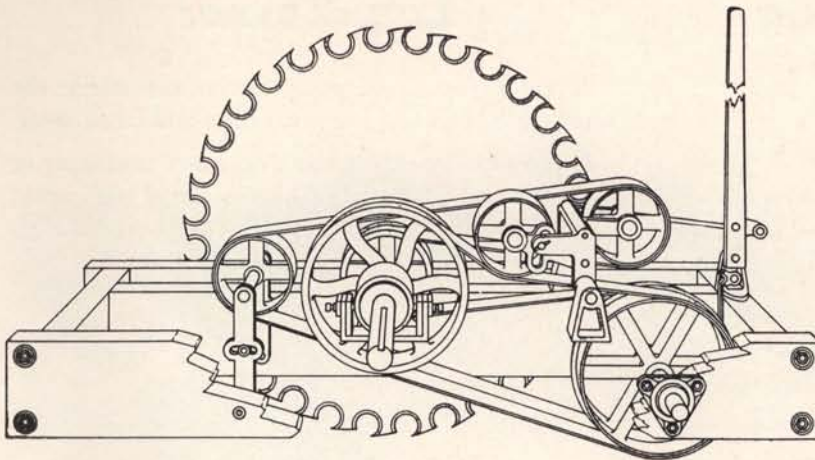
Log Turner

bevel gears and two friction pulleys. When not in use, the kickers drop below the skids to facilitate rolling logs on to the carriage.

The log turner is furnished complete ready to attach to the mill. It is capable of handling logs weighing 4,000 pounds or more.



Frick Mill with Top Rig and Log Turner



The Frick Improved Belt Feed, used on No. 00, 0, 01, and No. 1 Mills

Frick Improved Belt Feed

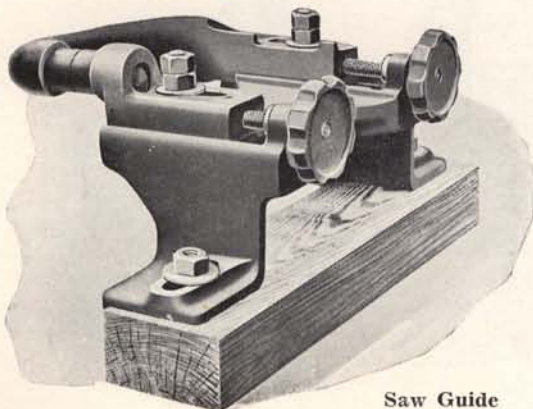
The illustration above shows the belting arrangement used on the feed mechanism of our No. 00, 0, 01, and No. 1 mills. The feed shaft is carried in two self-aligning bearings. The feed shaft and pulley need not be removed when transporting the mill from one site to another.

A shield is placed over the gears to keep them clean. Both the feed and gigback have an adjustment to take care of the shrinkage and stretching of belts. A spring is provided back of the operating lever to keep the pulleys in neutral position when the carriage is not in motion.

The two small tightener pulleys are so arranged as to multiply the pressure exerted by the pull on the operating lever, requiring but a very light touch of the lever to move the carriage.

The Alemite lubricating system is used on all bearings.

Special water-proofed woven cotton belt is used on all Frick feedworks.

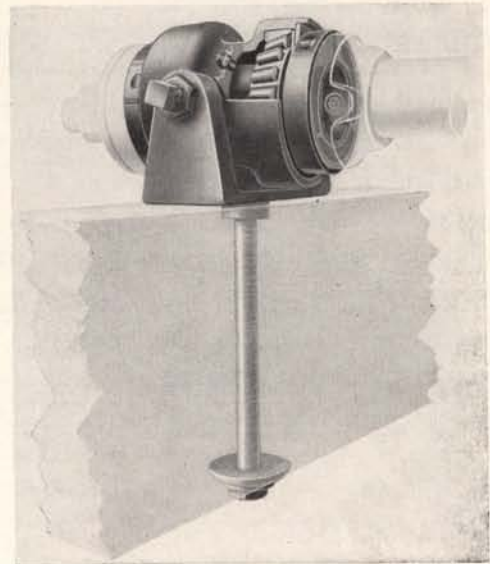


Saw Guide

Mandrel Bearings

The mandrel bearings used on all sizes of Frick mills are Timken roller, having two sets of rollers in each bearing. An Alemite fitting is provided between the two sets of rollers on each bearing. The bearing retains sufficient oil to lubricate the rollers for several days without further attention from the operator.

The roller bearings make a very much lighter running and more durable mill: they do not heat, and require less attention

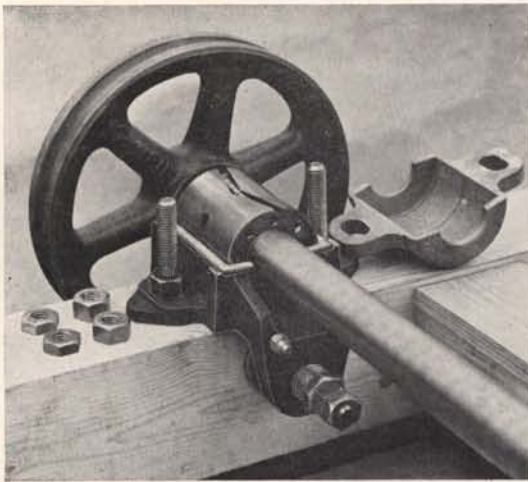


Timken Roller Mandrel Bearing

than plain babbitt bearings. We recommend Alemite grease for lubrication. The bearings should be greased about once a week.

Saw Guide

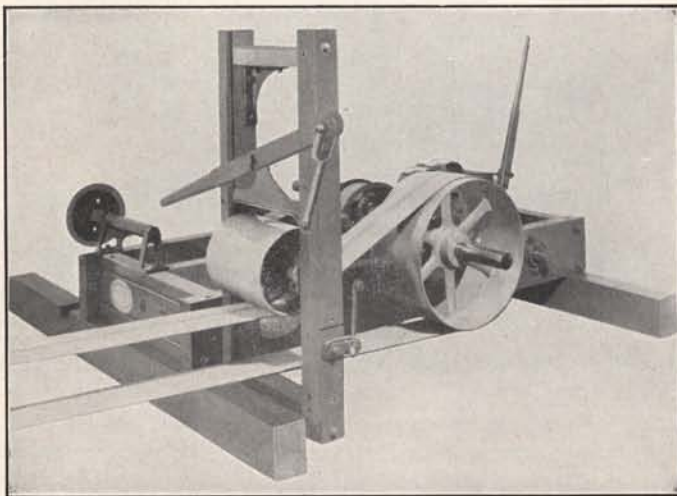
The saw guide is constructed of a solid base on which two adjusting arms are attached by means of studs. These arms have independent adjusting hand-wheels, by which the arms can be accurately set without danger to the operator. The saw runs against the end grain of hardwood blocks. The base is slotted to provide adjustment of the guide to the diameter of the saw being used.



Hyatt Roller Bearing on Carriage Axle

Streamlined Belt Tightener

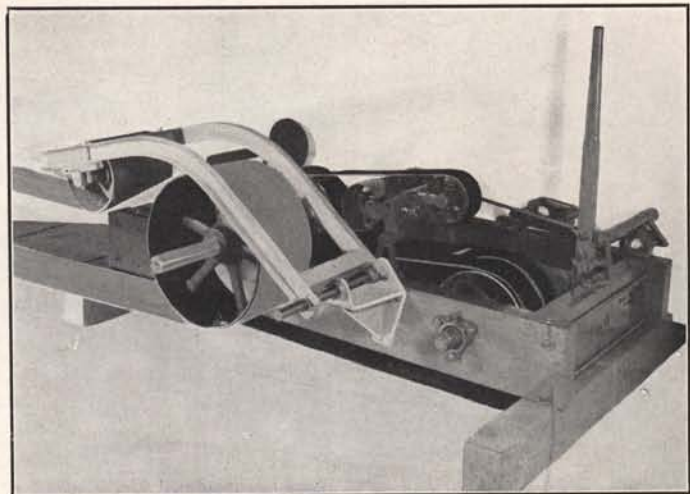
The Frick improved belt tightener or binding pulley may be attached to the husk of any Frick mill by means of a cast iron support bracket and three carriage bolts. The structural steel channel-iron frame is of attractive streamline design and of extra strength. The binding pulley proper is supported on a machine-steel shaft and runs on tapered Timken roller bearings mounted in both ends of the hub. An Alemite fitting in the hub provides pressure lubrication.



Wood Framed Belt Tightener

Carriage Axle, Wheels and Bearings

The carriage axles on all Frick mills are equipped regularly with Hyatt roller bearings. These bearings have an outer race that is clamped in a cast-iron bearing case and binder constructed with a grease channel to properly lubricate the rollers. The entire bearing housing is made adjustable to eliminate end play of the wheel axles. See illustration at left.



Improved Binding Pulley and Frame for Frick Sawmills

Wood Framed Belt Tightener

This tightener, too, may be attached to any Frick mill. It is secured by means of two heavy bolts and a rigid stay-rod.

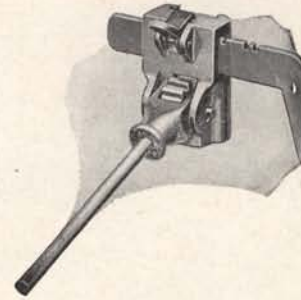
The frame is of selected hard pine, slotted for the floating pulley yoke and securely bolted together. The pulley yoke is fitted with babbit bearings, which carry the steel pulley shaft.

In operation, the heavy idler pulley and supports supply ample weight to insure proper belt tension. A sturdy wood handle with double-lever action enables the operator to lift the pulley off the belt with ease when desired.

Frick belt tighteners give a greater arc of contact on the sawmill drive pulley and maintain the proper belt tension to prevent slippage and loss of power.

Headblocks, No. 00, 0, 01 and 1 Mills

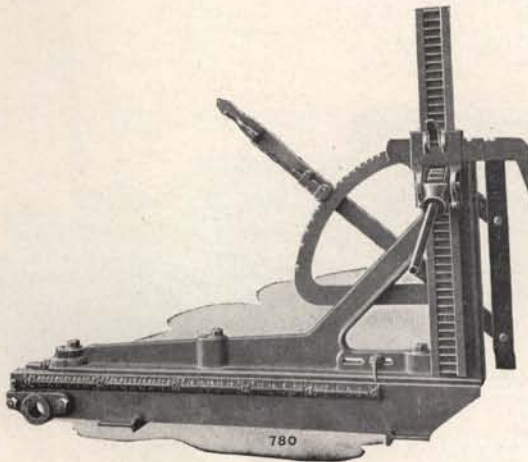
The illustration below shows the steel headblock used on our No. 00, 0, 01 and 1 mills. The ells on the No. 00 mill have adjustable semi-steel racks with accurately made teeth. On the No. 0, 01, and 1 mills, the ells have adjustable steel racks with cut teeth. The racks are adjustable to keep the ells in alignment, and the set-shaft pinion bearing on the headblock is also adjustable vertically to and from the ell rack to assist in preventing any end play in the ell.



No. 00, 0, 01 and 1 Headblock Dog

Headblock, No. 1 Mill

The photograph below illustrates the steel headblock used on our No. 1 mill, equipped with upper dog that can be attached to either side of the ell, and taper-attachment that can also be made either right or left-hand. The rack that engages the set-shaft pinion is steel, machine cut, and adjustable, so that the ells can be kept in perfect alignment. Should any part of the ell or rack become worn or broken by accident, it can be renewed, avoiding the expense of a complete ell.



No. 00, 0 and 01 Headblock, Ell and Dog Complete.
Note Taper Attachment

The ells are arranged to receive the upper dog rack and taper attachment: these can be placed on either side of the ells, as desired. The set-shaft pinion of the 00, 0, and 01 mill is cast-iron with cast teeth accurately made. On the No. 1 mill the set shaft pinion is of steel, machine cut and hardened. The ell for the No. 1 mill is of sturdy construction as seen in the photo at the left.

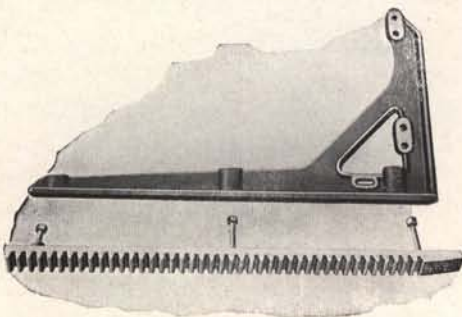
Taper attachments, or set-out knees, are not furnished as regular equipment, but can be fitted to any ell. All ells are drilled to receive this fixture; it can be installed at any time and on either side of the ell, to make it right- or left-hand.



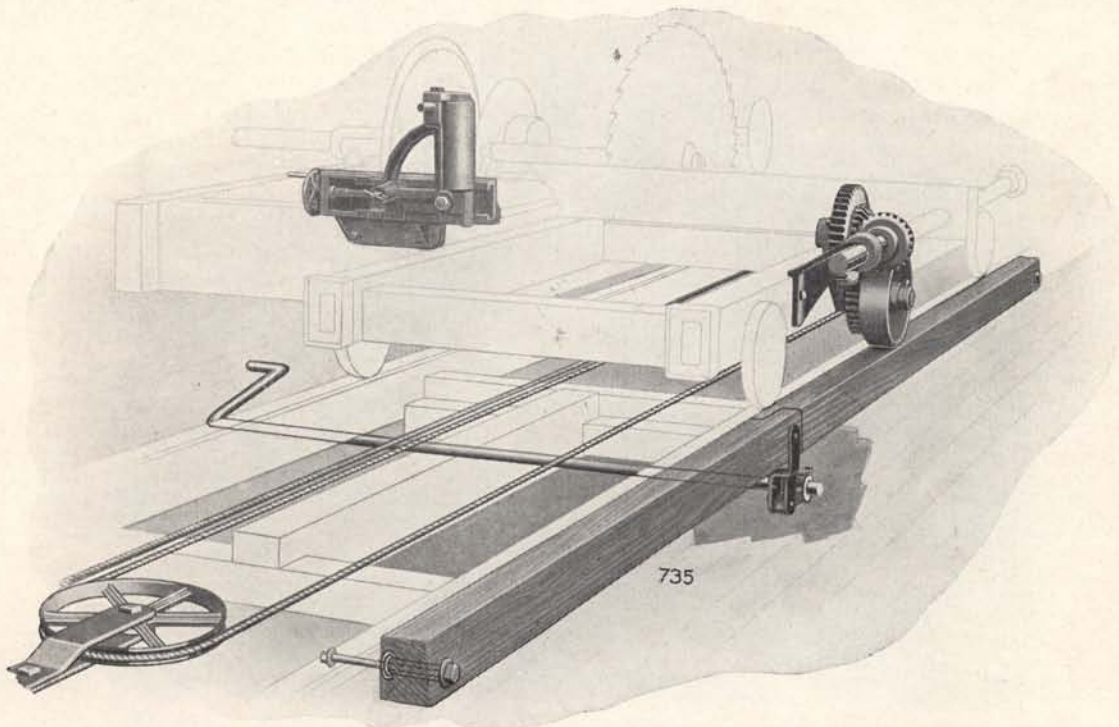
Headblock for No. 1 Mill

The set-shaft pinion for the No. 1 headblock is steel, machine cut and hardened.

The taper attachment shown above on the No. 1 headblock, is being replaced by the designed taper attachment shown at left in illustration 780. These taper attachments are extras and are furnished only when specified, for which an extra charge is made.



Headblock Ell, Showing Adjustable Rack



Power Receding Attachment and Gauge Roll

Power Receding Attachment

The picture above shows a popular set and receding attachment operated by a foot lever, or treadle, located convenient to the sawyer. It will be seen that pressing the foot on the treadle brings the jointed friction timbers into contact with a solid rubber wheel located on the moving carriage. Pressing the treadle, when gigging back or returning the carriage, recedes the headblock ells ready to receive another log. Pressing the treadle when feeding moves the ells forward toward the saw.

This attachment can be used on all of our mills, and the small extra charge made for it is soon made up in the greater efficiency of the mill.

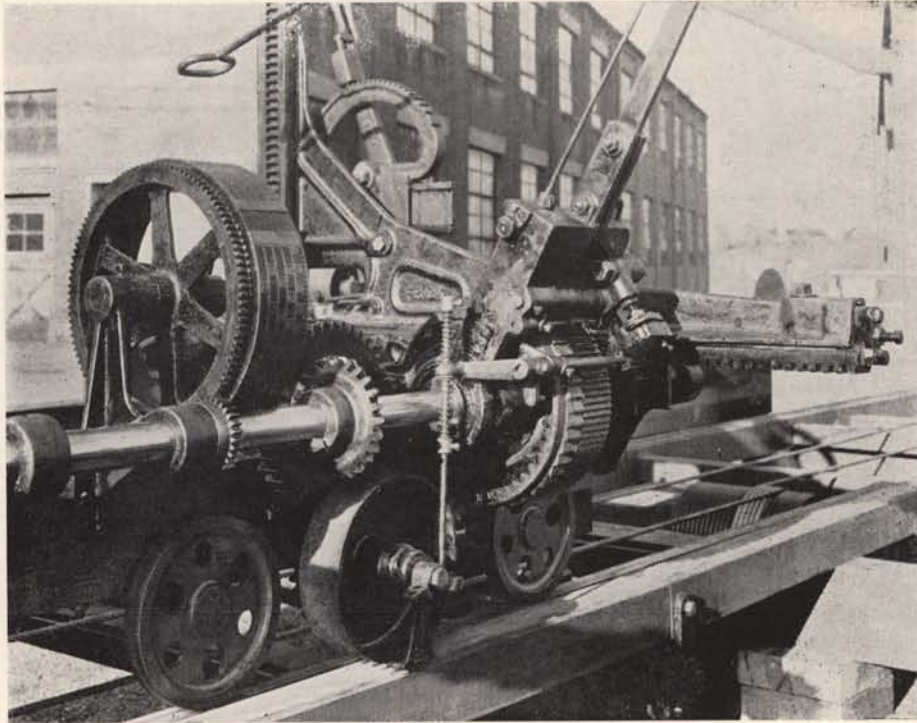
Combination Gauge and Lumber Roll

This attachment is designed with a polished metal roll mounted on a substantial base, made adjustable by means of a screw to form a gauge for sawing any thickness of timber up to 7 inches. The base is provided with a plainly visible graduated scale, which, in connection with the screw adjustment, makes change in gauge convenient and trustworthy. When not needed as a gauge roll in the upright position, it can be let down parallel with the base, thus serving as a slab roll. It is not included in our standard equipment, but is an extra.

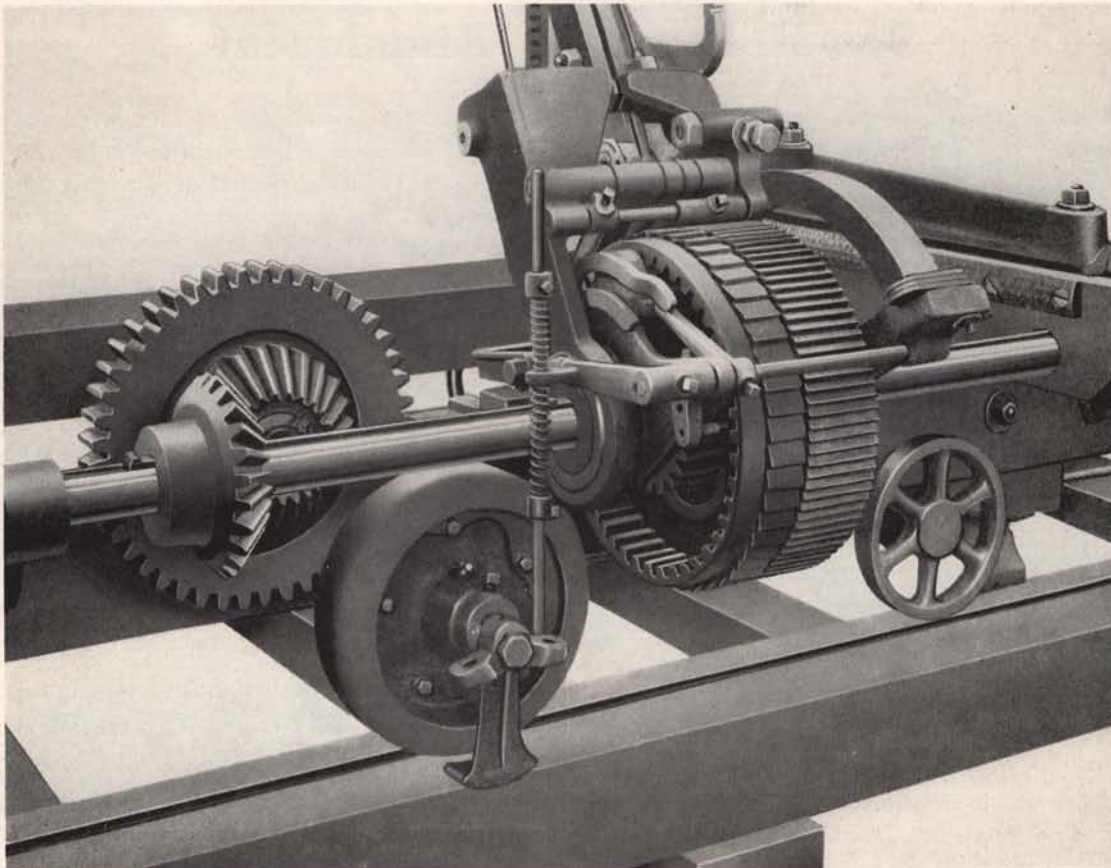
Wire Cable Drive

All Frick mills are equipped with wire cable drive for the carriages.

Horizontal sheave wheels are used on all Frick sawmills. Steel cable $\frac{3}{8}$ -inch size is standard equipment on the No. 00 and 0 mills; $\frac{1}{2}$ -inch cable is used on the No. 01 and 1 mills. This cable is especially constructed with a hemp center to improve its pliability, so that winding and unwinding does not injure it.



**Improved Combined Setworks Showing Power Receder with
Automatic Trip and Combination Lumber Gauge Wheel**



Setworks with Power Receder, Models B and C, Showing Automatic Trip

Automatic Pawl Trip

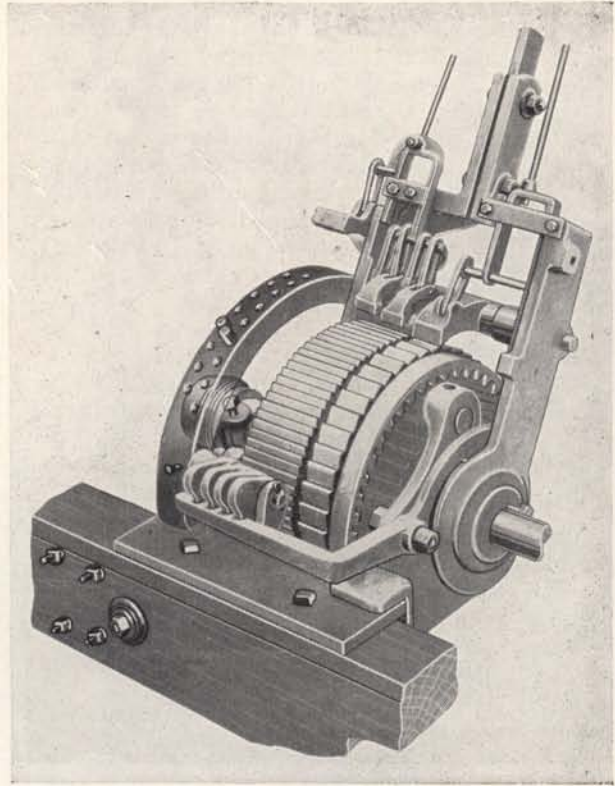
The improved combined networks is designed for an attachment to automatically release the pawls when used in conjunction with a power foot receder, which allows the ells to be receded without any attention from the off bearer or tail sawyer. When the power receder is disengaged, the setworks pawls drop back in working position ready for the sawyer to set the log. With this attachment the set-up pawls are always engaged, except when the sawyer may wish to recede the ells by hand. See cut on page 9.

This attachment is not furnished as part of the regular equipment, but must be specified in order and for which an extra charge is made.

This attachment cannot be installed in our standard setworks; neither can it be attached to the improved combined setworks purchased prior to 1929.

Improved Combined Setworks

The setworks is provided with a ratchet wheel having machine-cut teeth and pawls carefully ground to insure absolute accuracy in setting. The quadrant, or arc, for setting to various thicknesses of boards is provided with holes and pins, or stops. The rear stop is fitted with three independent pivoted plates, each of such thickness as to make a difference of $\frac{1}{32}$ of an inch in the movement of the ells, making it possible to get any movement in 32nds of an inch from the minimum to the maximum throw of the set-lever. By the use of an adjustable screw at the rear of the operating lever, provision is made for wear and different gauges of saws. By a partial



Improved Combined Setworks and Receder

twist of the reach rod to the right, the setting pawls can be raised to clear the pin, or stop, and the full sweep of the set lever may be obtained without disturbing the stops.

This setworks is so designed that it recedes the headblock ells about two times as fast as they move forward.

We furnish the setworks and receder as a part of the regular equipment of all Frick sawmills without extra charge.



Cutting Lumber in West Virginia Timber with a Frick No. 0 Belt-Feed Sawmill

The No. 0 Belt Feed Sawmill

Owners of medium sized engines who are engaged in regular and custom sawing, who do not wish to invest in the larger and more expensive mills, will find No. 0 ideally suited to their needs. It is well built and very durable, and equipped with all of the desirable features and conveniences found on our larger and more expensive mills. Furnished regularly with 10-foot carriage and 35-foot ways, or 15-foot carriage and 45-foot ways, or 20-foot carriage and 55-foot ways, or 25-foot carriage and 65-foot ways, as desired. Features include Frick patented belt feedworks with 4-inch belts, cable drive with horizontal sheave wheels, self-aligning Timken roller mandrel bearings, Hyatt roller bearings on carriage axles, 2 structural steel headblocks and ells with cut steel detachable rackbars, with provision for adjustment, 2 upper dogs, improved combined networks as described on page 11, mud sills, one cant hook, and necessary tools.

Extra attachments, such as the belt tightener illustrated at right, lumber trucks, parallel knees, foot power receder with automatic trip, saw-dust drag, vertical gauge board, extension mandrels, etc., can be furnished at extra charge.

Specifications

Will swing 60-inch saw.

Husk—Length, 7 feet 1 inch; width, 3 feet 4 inches.

Mandrel— $2\frac{1}{8}$ -inch diameter, 66 inches long, with collar $4\frac{1}{4}$ -inch diameter.

Mandrel Bearings—Timken Roller, self-aligning.

Mandrel Pulley—Standard 22-inch diameter, 10-inch face, other sizes to suit power.

Feed— $\frac{1}{2}$ -inch to 5-inch. Gigback, $\frac{1}{2}$ -inch to 10-inch, each revolution of saw. 4-inch belts.

Carriage—Width, $32\frac{1}{4}$ inches; timbers, $3\frac{1}{2}$ x 5 inches. Standard length in 10-foot and 15-foot sections.

Carriage Axles and Wheels—Axles $1\frac{1}{8}$ -inch diameter, equipped with wheels 8-inch diameter, pressed on. Three sets axles and wheels under 10-foot carriage. Four sets under 15-foot carriage.

Carriage Axle Bearings—Hyatt Roller.

Set Shaft— $1\frac{1}{8}$ -inch diameter—full length.

Networks—Combined improved type, with hand receder and machine-cut teeth, and pawls carefully ground for accurate setting in 32nds of an inch.

Headblocks—Steel, opening 36 inches. Fitted with upper dogs and ells, having cut steel detachable rack-bars. (See cut No. 780, page 8.)

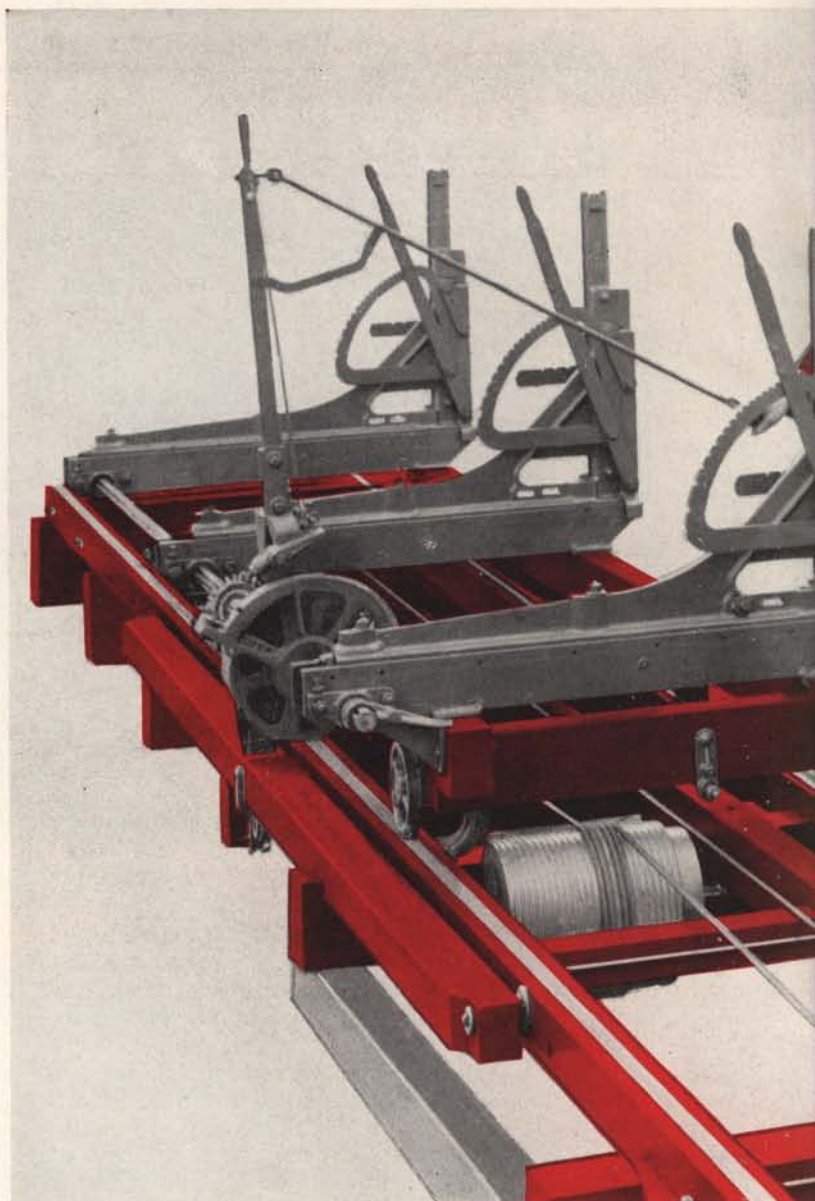
Ways—Timbers 3 inches x $4\frac{1}{2}$ inches. Standard lengths in 5-foot, 10-foot and 15-foot sections.

Cable Drive— $\frac{3}{8}$ -inch wire cable. Sheave wheels set horizontally.

Approximate Weight—15-foot mill, 4000 pounds, 20-foot mill, 4500 pounds.

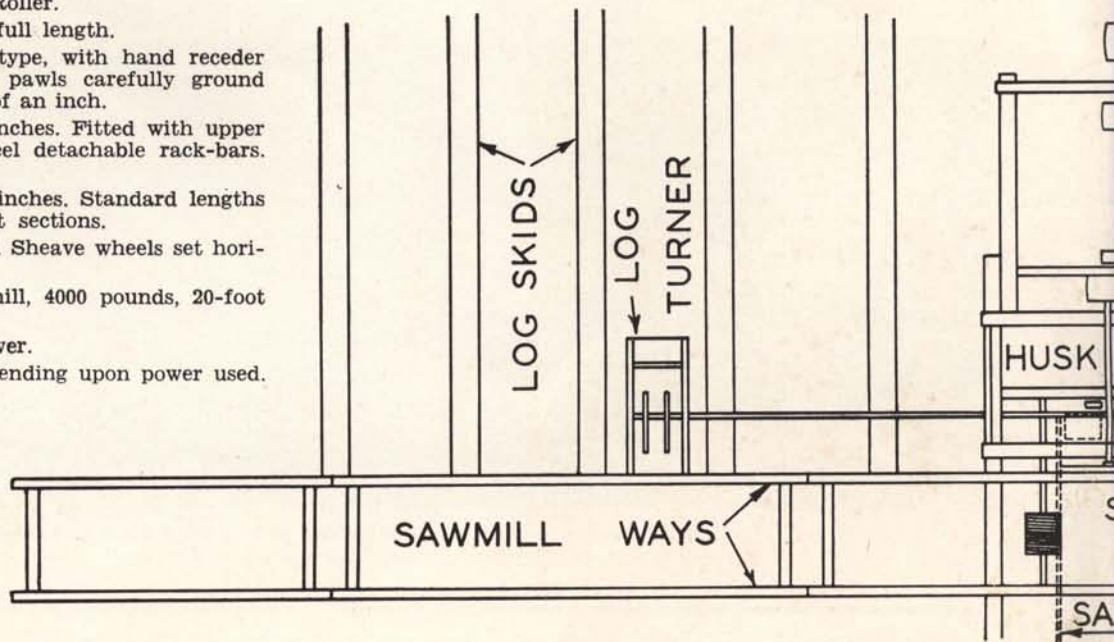
Power—40 to 75 Brake Horsepower.

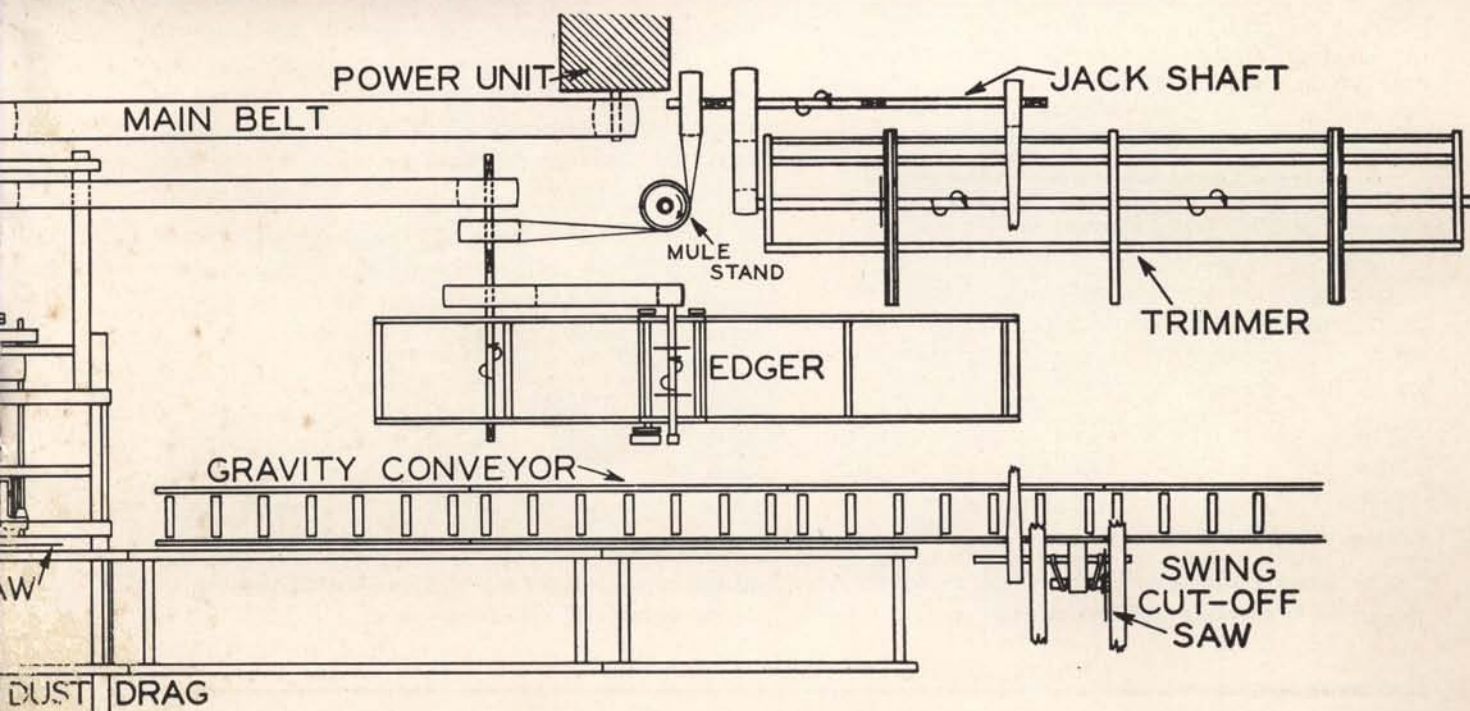
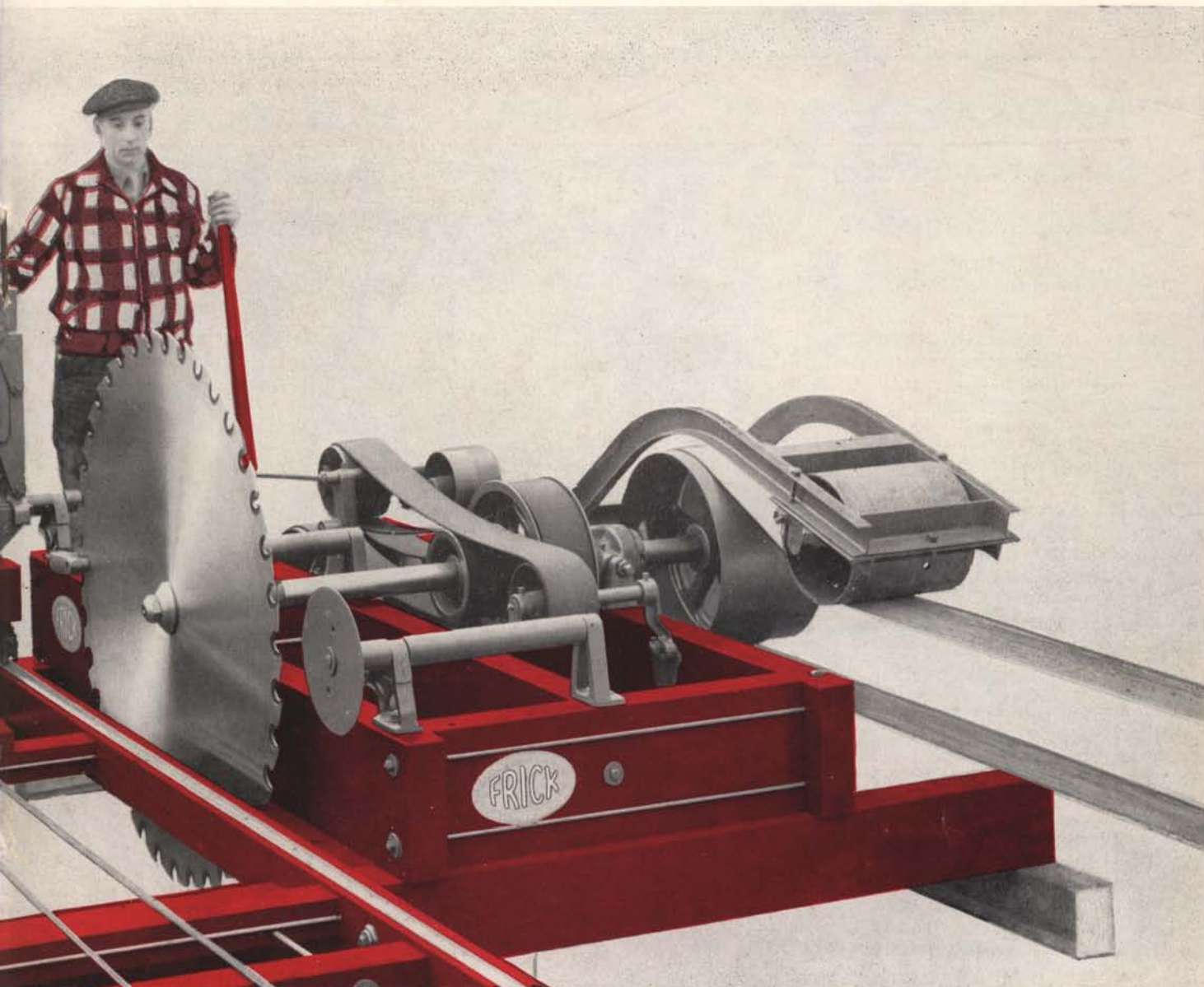
Capacity—5M to 12M daily, depending upon power used.



Above: Frick No. 0 Sawmill

At Right:
Typical Arrangement of
Mill with Edger,
Trimmer, Swing
Cut-off, and
Accessories.





Double-Acting Setworks With Power Receder

The purpose of the power receder when used with the double-acting setworks is to relieve the setter of the necessity of continually winding up a receder spring, and to permit moving the ells in or out by means of the movement of the carriage.

The setworks is of the same general design and high quality construction as that used with spring receder, described elsewhere in this catalog. However, the setworks is altered in a manner which permits the setter to operate the power receder by means of one of the setworks operating levers. By means of this design, a small movement of the setworks left-hand lever raises the setting pawls off of the setworks ratchet wheel and a further movement of this same lever engages and operates the power receder. Therefore, these two attachments operate as a unit and can not be used separately.

The power receder friction wheel is made of rubber. It pivots around a shaft supported on top of the carriage rails. The friction rail is bolted to the center section of the ways rail. The power receder drive wheel is lowered to meet the friction rail by means of the setworks left-hand operating lever. The friction wheel is returned to inactive position by the action of the light spring shown.

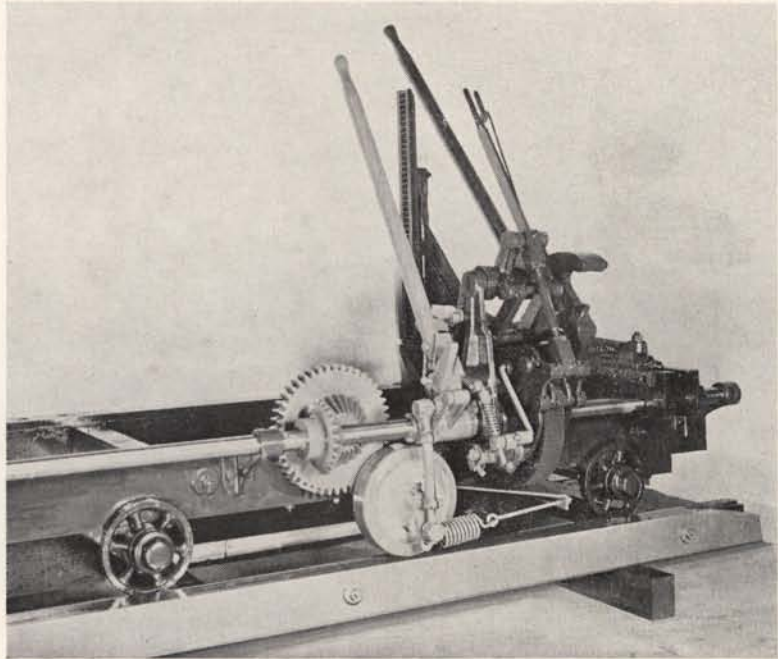
These two attachments provide a highly efficient, quick-acting, and easily operated means of setting and receding the head block ells.

Frick Lumber Gauge Wheel

The lumber gauge wheel was designed to meet the requirement of the operator who demands a gauge that is accurate in registering the location of the ell from the saw.

The gauge wheel is actuated by means of a cut pinion on the set shaft and a cut gear on the gauge wheel. The gauge wheel registers the exact position of the ell from the saw.

The bracket that carries the wheel is bolted to the setworks carriage rail at any point near the set-



Double-acting Setworks with Power Receder

works, at the option of the setter.

The lumber gauge band is made of brass, etched to bring out the figures clearly and distinctly, to enable the setter to read it easily from any reasonable distance.

The band has five scales on its face. The first scale to the left is divided into inch, half-inch and quarter-inch divisions. The second, third, fourth and fifth scales represent respectively the number of 1", 1¼", 1½" and 2" boards that can be cut from a predetermined width of log. These scales have the divisions arranged to allow for saw kerf and ⅛" to 1/8" for sawing lumber full thickness.

The indicator is made of brass painted black and the figures are polished brass. This indicator can be set in any position to meet the desires of the setter.

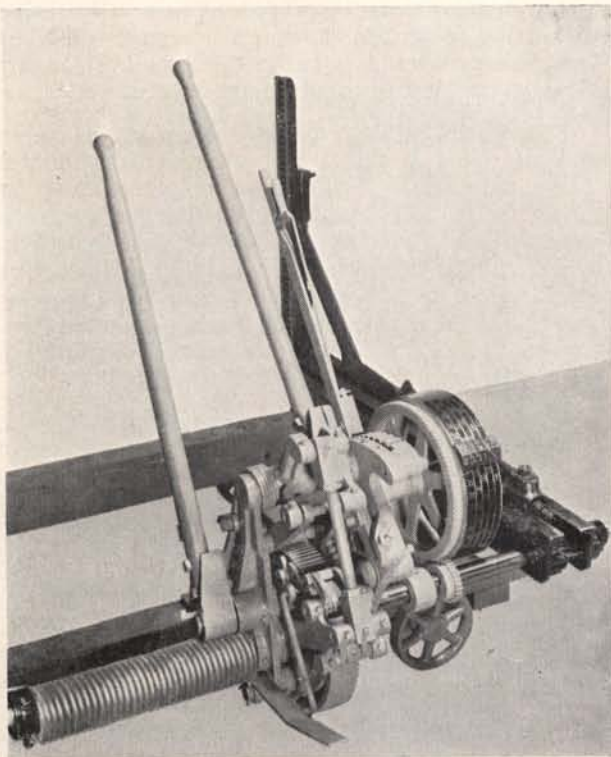
The gauge is made in two types; one for double-acting setworks, to be read from the rear of carriage, or setter's position; and the other type to be used with Models "B" and "C" setworks, that is, to be used when the sawyer does the setting.

It is important that we be advised on what type of mill the gauges will be used, as they are not interchangeable.

Frick Double-Acting Setworks With Spring Receder

The Frick double-acting setworks is designed for use on all Frick sawmills and can be fitted to other makes of mills on which the set shaft is mounted outside the carriage rail. This setworks is manufactured to fit 1 $\frac{3}{4}$ in. or 2 in. dia. set shafts; however, it can be furnished to fit set shafts of other sizes, which are less than 2 in. dia., when so ordered.

The ratchet wheel and pawls are made of steel, hardened to the correct degree to insure long life. The ratchet wheel has 96 machine-cut teeth of 2 $\frac{1}{4}$ -in. face. The setting pawls contact the full width of the wheel, thus providing a very large wearing surface for the pawls. The small number of teeth in the wheel permits a deep tooth design, which prolongs the life of both the wheel and the pawls. The ratchet wheel is welded to a sleeve 10 in. long, which also carries the pawl operating arms. It rests in holes bored in the main brackets of the setworks. This design results in a compact self-contained unit, which is very quickly and easily attached to the carriage and set shaft by means of four bolts and one key.



Frick Lumber Gauge Wheel and Double-acting Setworks
with Spring Receder

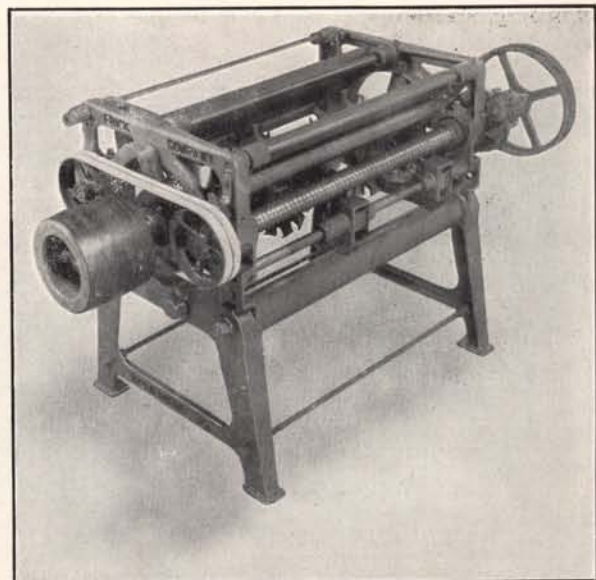
This setworks is equipped with two sets of pawl arms, each set supporting four pawls. The pawls are so arranged that lumber may be sawed to any thickness, in divisions of $\frac{1}{32}$ in., by adjusting the position of the gauge bar stop with respect to the adjustable screw stop. This close setting is possible and back lash is eliminated because one set of pawls is engaged and one set released simultaneously, regardless of the setting. Pawls are held firmly to the ratchet wheel by means of springs.

To use this setworks, it is necessary to have a man ride the carriage to operate it. It is also necessary to use a spring receder. The Frick double-acting setworks will take the same bolt holes now provided in the carriage rail for Models "B" and "C" improved setworks.

The Frick 27" and 32" Gang Edgers

The Frick edger is made of iron and steel throughout. The husk frame has two side plates with all attaching surfaces machined so they will be in alignment and interchangeable. (With this system of manufacturing, it is impossible to get the rolls and mandrel out of alignment.)

The cross-tie members are made of large pipe, held in place with rods inside them. *The ends of the pipe and the seats in the frame are machined to bring every part together squarely.* The feed rolls run on Hyatt bearings, fitted in machined cases. These cases are made ball-shaped to rest in *machined sockets*, which keep them always in alignment with the saw mandrel.



Frick Gang Edger

The mandrel used to carry the saws is made of high carbon steel, carefully ground, and is carried on Shafer roller bearings. These bearings rest in ball-and-socket sleeves and are self-aligning. The bearings are carried in spiders that attach to the side frames by means of three special bolts with tapered heads, that fit in sockets in the spiders; all play is taken up when clamped in place.

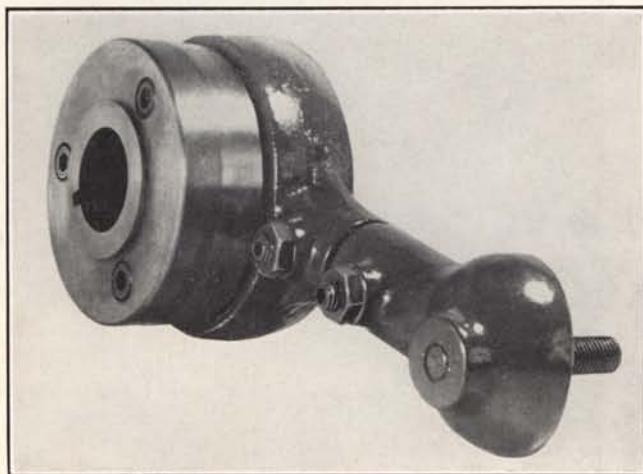
To remove the saws it is only necessary to remove the three nuts that hold the spider, and pull off the bearings and spider complete. The saws and collars will then slide off the shaft after the saw sliding yoke is removed. This is held in place by one nut.

The shifter sleeve is very long and slides easily. This slide and the fork that moves the saws are clamped together in a ball-and-socket, making it impossible to get them clamped out of alignment.

Now available, at extra cost, is the one-piece ball-bearing saw collar and collar arm, seen below, which overcomes the wear on the bearing surface of the babbitted shifter fork from dirt, dust, and grit. With the new shielded ball-bearing, enclosed within the complete assembly, the wearing of the bearing surface is reduced to a minimum.

This new design provides for self-alignment of the collar, yet is constructed in such a way that the correct cutting position is held rigidly true. This insures a clean, true edge on all work passing through the edger.

This assembly is interchangeable with the shifting fork and collar which has been used as standard equipment.



Ball-bearing Saw Collar and Collar Arm

The Alemite lubricating system is used for all bearings.

The saw frame is made so that any machine can be changed from right to left hand simply by re-arranging the parts to meet special requirements of the mill set-up.

Each saw collar is 4" long, thus preventing binding of collars on mandrel when operating them with lever. The shift fork engages the collar, which prevents any possible tendency of the saw to heat from friction.

The pressure rolls are hung on shafts in the upper part of the frame. These shafts fit in machined holes. Both feed rolls are spurred.

The feedworks is driven by two belts of 2" size, operating on large pulleys. To the feed roll is attached an automatic belt tightener with roller bearing pulley.

A 3" pulley is placed on the mandrel to drive the feed and a 13½" pulley on the feed shaft. The belt is placed on the tightener very loose and no strain is on it until a board is fed into the rolls. Immediately the tightener places just enough tension on the belt to feed the board through. The belt tightener and belt are standard equipment.

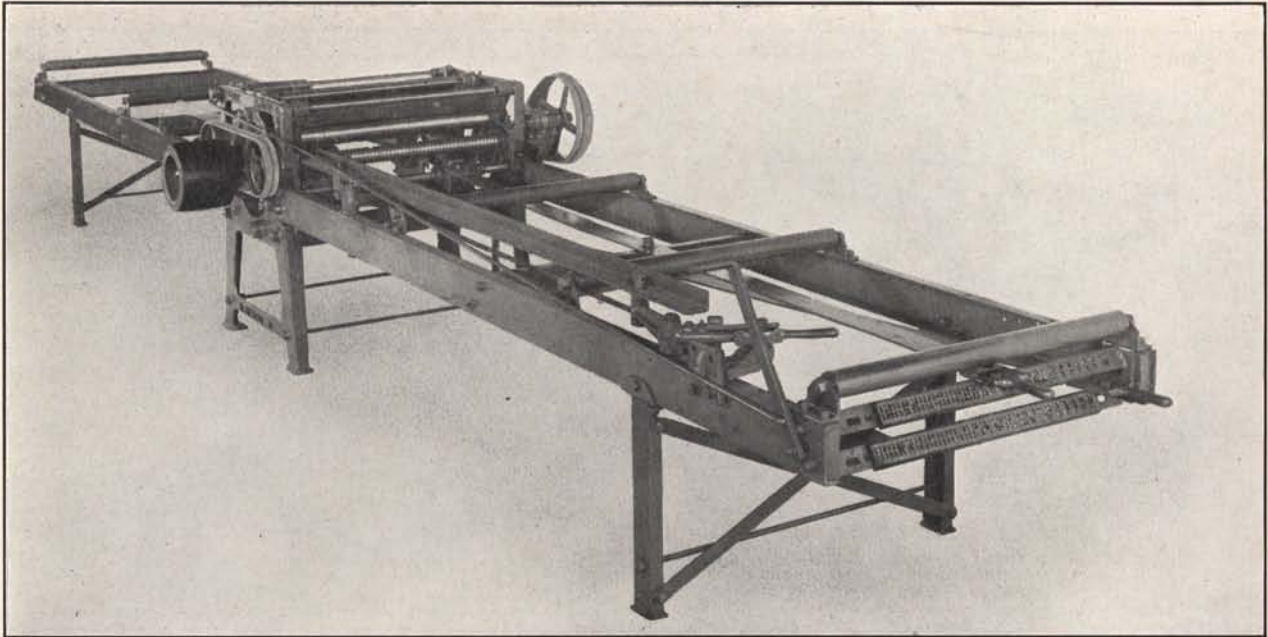
On the opposite ends of both the feed roll and delivery roll, pulleys of 8" diameter are provided to drive the delivery roll.

The machines are arranged for a rear pressure-roll lifting device, for raising this delivery roll when very thick material is being sawed. This attachment is supplied at a slight extra charge.

When both saws are movable, they can be spaced as wide apart as the size of the machine permits. The closest setting with this arrangement will be 12"; with the collars arranged for narrow strips the closest distance between saws is 2½", and the widest board will be 12" narrower than the width of the machine. The 27" machine would rip 15" wide, and the 32" machine cut 20" wide. Other arrangements of parts can be made to vary these widths to meet many requirements.

If boards wider than 6" are to be cut, when one edge of a board is full, the gauge can be set beyond the stationary saw; then by using the sliding saw any width of board can be cut within the capacity of the edger.

The front and rear tables are constructed entirely of structural steel, properly welded and tied to make a rigid frame. Both front and rear tables are made of 5" channels, 10'-0" long. The rolls run on ball bearings and are supported on rods bolted to the steel stands. The table legs are made of channel iron and can be removed. The guide angle of the lateral gauge has a movement of 6⅜" allowing material to be cut any width up to 6". See illustration on next page.



Left Hand View of Gang Edger

All parts are designed so that they can be assembled either right or left hand. Arrangements for one or two saw-shifting arms are incorporated.

Standard equipment includes one stationary saw and one movable saw.

The scale is located back of the first roll and is made adjustable to the correct position with respect to the saws, thus reading correctly at the shift arm indicator.

The rear table is constructed similar to the feed table in every respect.

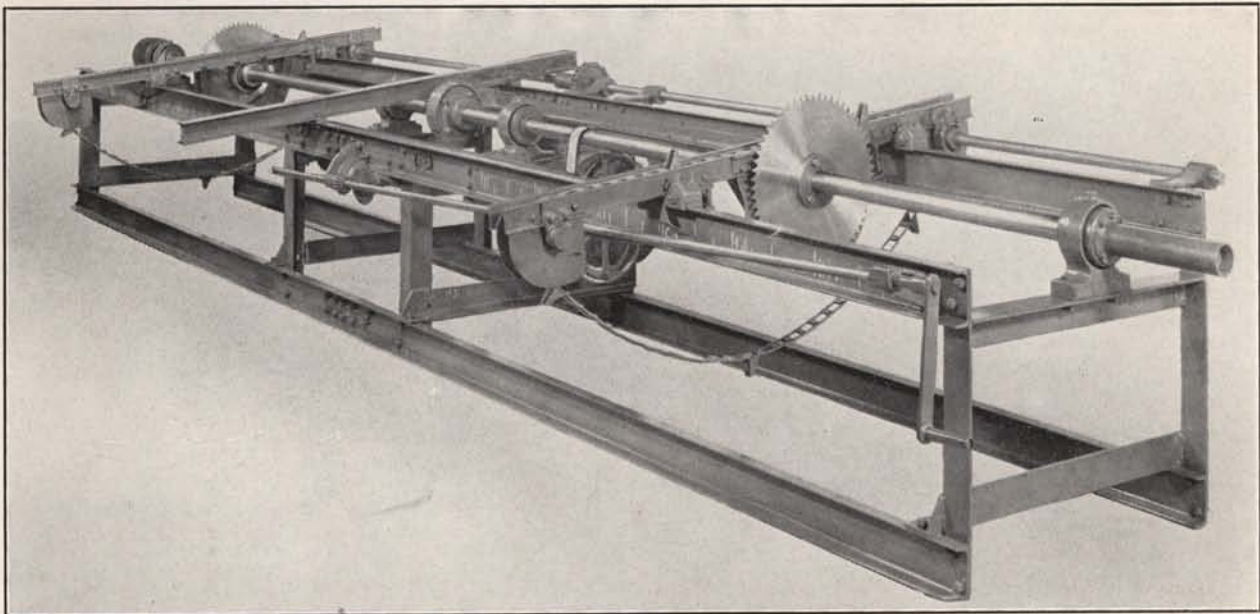
General Specifications – Frick Gang Edgers

	27" Edger	32" Edger
Widest Material Edger will receive	27 inches	32 inches
The distance between the lateral gauge (when opened to its extreme width) and the stationary saw is 6". The greatest distance obtained between saws with the movable saw extended the extreme width, is	21 inches	26 inches
If both saws are made movable the greatest distance between saws is	27 inches	32 inches
Size of Saws, 9 gauge	14" diameter	14" diameter
Diameter of Mandrel	2 inches	2 inches
Size of Mandrel Pulley, diameter, face and bore	8" x 8" x 2"	10" x 8" x 2"
Speed, r. p. m.	1700	1700
Length of Feed Table	10 ft. 0 in.	10 ft. 0 in.
Length of Rear Table	10 ft. 0 in.	10 ft. 0 in.
Length Overall	21 ft. 8 in.	21 ft. 8 in.
Width of Table	3 ft. 10½ in.	4 ft. 3½ in.
Width Overall	4 ft. 2 in.	4 ft. 7 in.
Approximate Weight of Standard Machine Packed for Shipment	1660 lb.	1785 lb.
Approximate Weight of Extra Movable-Saw Attachment	70 lb.	70 lb.
Thickness of Stock for which Machine is Designed, up to	3 inches	3 inches.
Rate of Feed per Minute, approximately	100 ft.	100 ft.

Front and Rear Press Rolls, Standard Equipment.
 Shafer Roller Bearings on Mandrel.
 Hyatt Roller Bearings on Feed Rolls.
 Ball Bearings on Table Rolls.
 Alemite Hydraulic Gun, Standard Equipment.
 One Stationary Saw and One Movable Saw, Standard Equipment.
 Belt Tightener, Standard Equipment.

Feed Belts, Standard Equipment.
 Board Guide on Feed Table, Standard Equipment.
 Rear Feed Roll Lifting Device at Extra Cost.
 Ball-bearing Shifter Fork, at extra cost.
 Two Movable Saws at Extra Cost.

Any Edger can be changed from one hand to the other without any additional parts.



Overall View of the Frick Trimmer: Note Joints in Center Which Facilitate Handling, Liberal Size of Frame and Moving Parts, Accessibility, Handy Control Levers, and Other Superior Features. Can Be Arranged for Right or Left Hand Operation.

The Frick Two-Saw Trimmer

The Frick two-saw trimmer has a frame of 5" steel channels. The legs are secured by bolts at top and bottom.

The saw mandrel, which is 2½" in diameter, is carried on four roller bearings. The lumber support bars consist of three channels, welded into "H" sections. Support pads are bolted to the block to carry the Link Belt feed chain.

The transfer blocks each carry one babbitted ball-and-socket bearing for supporting the saw mandrel. End play is eliminated by means of an adjustable collar on the end of the saw supporting sleeve, opposite the saw collar. The saws are secured to the sliding saw collar by means of three hollow-head cap screws, counterbored into the collar so as to prevent the heads from throwing blocks of wood toward the operators. The bearings are fitted with "Gits" wick oilers. The feed shaft bearings are also of the babbitted ball-and-socket type.

The transfer block shoes each operate on two rollers which are adjustable and are enclosed: they are provided with leather sweeps to keep dirt from under the rolls. The transfer blocks and saws are adjustable by means of four racks which engage with four pinions, producing smooth movement. The racks are each supported on two wheels, eliminating unnecessary friction.

Either an 18" or a 20" saw may be used. The speed should be 1800 to 2000 r. p. m. When the saw is operating at 1800 r. p. m. the slow feed speed

is 46 ft. per minute and the high feed speed is 63.8 ft. The lumber is placed on the transfer blocks, where two endless No. 57 Link Belt chains, of special "promal" hardened material fitted with drag links, carry the boards through the saws.

The feed shaft which drives the drag chains is operated from the feedworks gear case by means of a steel roller chain. This chain is part of the slip clutch assembly. If the drag chains should be overloaded for any reason, this slip clutch goes into operation and prevents damage to the trimmer. When the condition which caused overloading of the drag chains is corrected the slip clutch automatically ceases to function and normal operation is resumed.

The feedworks gear case is entirely enclosed and is mounted rigidly on two angle irons near the center of the trimmer. It is driven by means of a belt which runs directly on the mandrel. The two speeds of the feed drag chains are obtained by means of two trains of gears mounted inside the feedworks gear case. The spiral jaw clutch engages either train of gears. The clutch is operated by a lever at the front of the trimmer. When this clutch is placed in the neutral position, all motion of the drag chains is stopped. The pinion and gear shafts are mounted on Timken roller bearings, thus assuring precision alignment and long life.

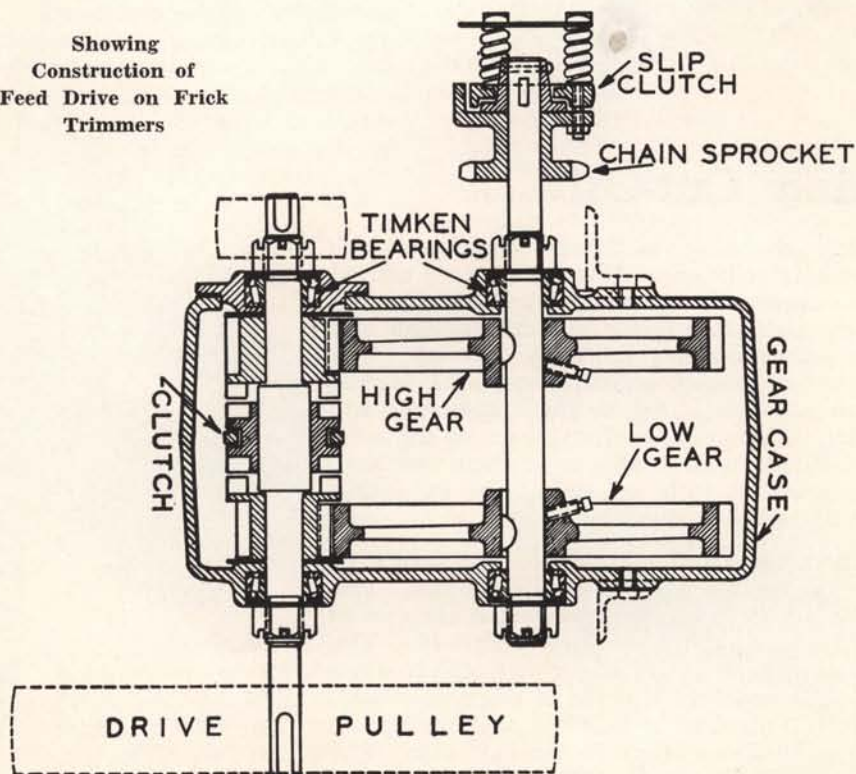
A Rockwood pulley, 8" dia. x 8" face, two 18" cutoff saws, feed belt, tools and grease gun comprise the standard equipment. Saws of 20" size can be supplied at slight extra cost.

General Specifications, Frick All-Steel Trimmers, 20-Ft. Size

No. of Saws 2
 Dia. of Saws, (10 Gauge) 18 or 20"
 Length of Stock Trimmed 6 to 20 Ft.
 Thickness of Stock Trimmed
 { Up to 4" using 18" saws
 { Up to 5" using 20" saws
 Operating Speed of Saws 1800 r. p. m.
 Number of Feed Speeds, in Addition to
 Neutral Position 2
 Speeds of Feed Chain, in Feet per Min.
 0-46-63.8
 Diameter of Mandrel 2 1/4"
 Roller Bearings on Mandrel 4
 Mandrel Supported at Saws by "Gits Oiled"
 Babbitt Bearings.

Size of Mandrel Pulley
 8" Dia. x 8" Face x 2 1/4" Bore
 Ball-and-Socket Babbitt Bearings on Feed Shaft
 Simplified Feeding Mechanism — Extremely
 Positive in Action.
 Transfer Blocks are Rack-and-Pinion Operated
 from Either End of Machine.
 Standard Equipment Includes Feed Belt and
 Tools.
 Machine is Built in Two Sections to Facilitate
 Handling
 Approx. Weight of Machine 2400 Lb.
 Overall Length of Machine 23 Ft.
 Overall Width of Machine 5 Ft., 10 In.
 Overall Height of Machine 3 Ft., 2 In.

Showing
 Construction of
 Feed Drive on Frick
 Trimmers



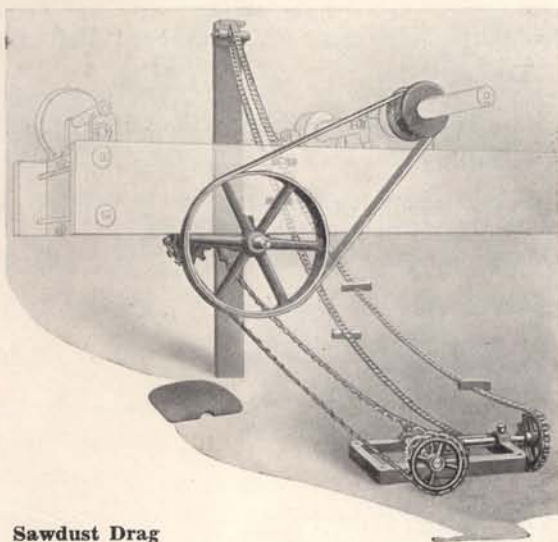
Sawdust Drag

The illustration shows our simplified and dependable sawdust drag, one forming its own trough of any length, depending upon the length of the drag chain used and the location of support for the outer sprocket wheel bearing.

The gear box is made of heavy cast iron and is provided with a metal cover, making it very durable.

The direction of the haul may be reversed by changing the mitre gear on the drag sprocket shaft.

The sprocket chain drive from the countershaft to gearing is positive and will work even though water should collect in the pit.

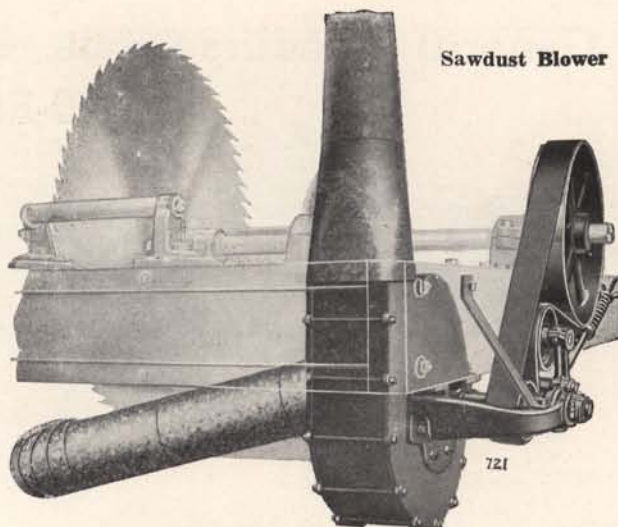


Sawdust Drag

Swing Cut-Off

Our swing cut-offs are made of a channel iron frame with yoke, two braces and frame hangers. The hangers are carried on bearings which also carry the countershaft. These bearings are balled off where the hangers ride and form a ball and socket joint, thus preventing any tendency to bind. The hangers do not ride on the countershaft, but on the bearing proper. The bearings are babbitted for the countershaft and also for the mandrel. High grade babbitt is used on the mandrel bearings to eliminate friction and make them last well. The saw shield is provided with necessary holes for taking care of saws up to 36 inches in diameter.

Two 6 x 10" pulleys (one tight and one loose) are provided; also a 6 x 16" drive pulley and a 6 x 6" mandrel pulley. The countershaft is 1 1/4" dia., 5 feet long, keywayed at the end to receive mitre gears when a positive drive is desired. The swinging bearings are provided with adjusting screws to align the saw properly. The mandrel is made of machinery steel, 19 1/2" long over all, 1 1/4" diameter at bearings, and having saw collar 4 1/8" diameter. Will receive saw having 1 3/8" hole. The customary speed of cutoff saw is from 1200 to 1600 r. p. m. depending on the diameter of the saw.

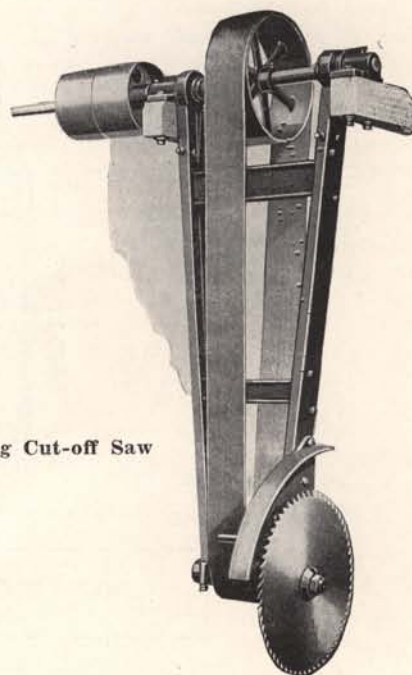


Sawdust Blower

Sawdust Blower

The Frick sawdust blower is located under, and attached to, the husk timbers, where its proper and free operation is not interfered with. The blast fan has six blades, 22" dia. by 7 1/2" face. It runs from 2200 to 2400 r. p. m. in ball bearings driven by a 5-inch belt, with idlers arranged to give the greatest possible contact, and for taking up slack. Suction pipe and discharge pipe are each 8" in diameter.

Sixteen feet of discharge pipe are furnished, measured from the elbow above the mill, and an effective collector is also included in the equipment. The blower is of sufficient capacity to cover the requirements of any of the mills we build, and is recommended as a great labor-saving device.



Swing Cut-off Saw

Specifications, Frick Wedge Saws

Framework—Structural steel, with side members electrically welded, and cross members bolted in three directions, making the machine very rigid.

Mandrel—1½" dia., 34½" long, with 4½" saw collar. Runs in ball bearings having universal adjustment.

Pulley—Rockwood, 8" dia., 6" face, keyed to shaft.

Balance Wheel—16" dia., keyed to shaft.

Saw—Solid tooth, 26" dia., 10 gauge at eye, 15 gauge at rim, 60 teeth. Saw can be removed from mandrel without disturbing any adjustments on mandrel or guide. A guard is placed over saw for safety.

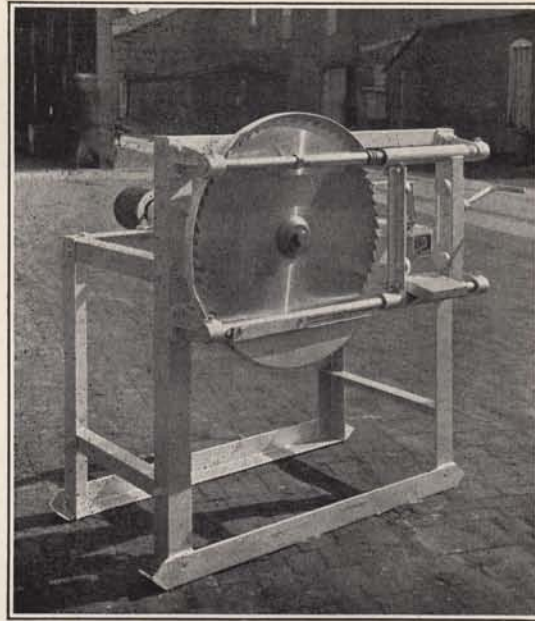
Saw Speed—1500 to 1800 R. P. M.

Capacity—Depending upon ability of operator and kind of wood used. A good operator will cut 5M or more wedges per day.

Size of Wedges—4" to 7" wide, ¼" to ¾" thick at butt, 0" to 3" at point, and 10" to 14" long. The blocks from which wedges are cut may be 4" to 7" thick, 10" to 14" long, and any width that can be made from logs or slabs. The block is held in place by means of clamping heads, holding the block securely while being sawed. By the use of an adjustable gauge on the carriage, both the taper and the thickness of wedge can be varied within the limits given above.

Dimensions—Base, 48" long, 24" wide; Width over slide table and pulley, 41¼". Height, 49¼". Foundation anchor bolt holes are on 34½" centers the long way, and

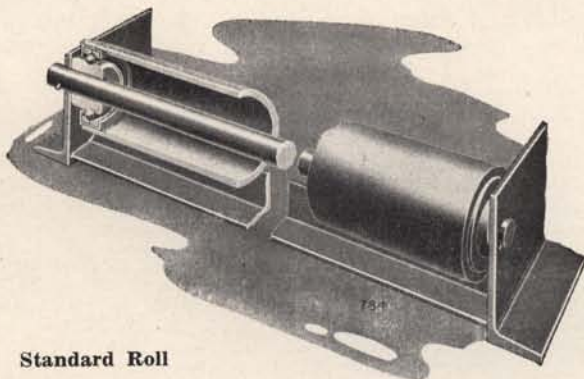
21" centers across the width.
Approximate Shipping Weight—390 lb.



Frick Portable Wedge Saw Machine
Patent Number 2,054,218

Gravity Lumber Conveyors

Gravity conveyors furnish an inexpensive and time-saving method of handling lumber. They are becoming more indispensable in moving lumber from the mill direct to any part of the lumber yard for loading and unloading cars, trucks, etc. saving labor and much time that can be used to better advantage. The rollers are so spaced that boards of 3½-foot minimum length can be successfully handled.

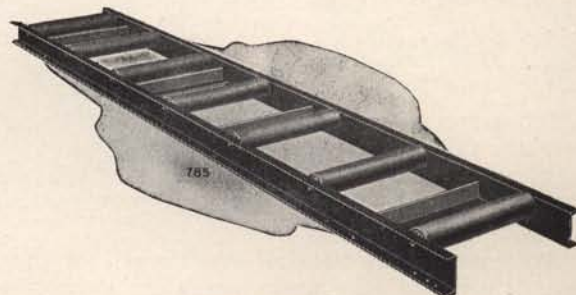


Standard Roll

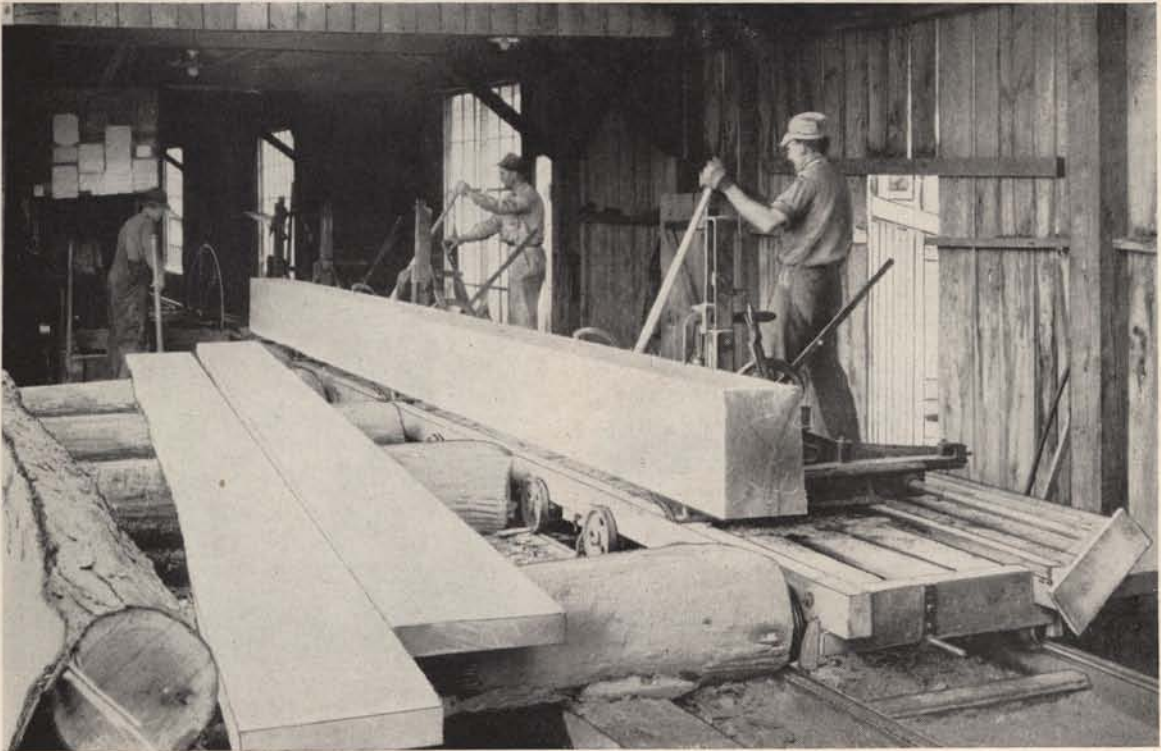
Our standard conveyors will handle the ordinary run of mill output, such as one and two-inch boards, framing lumber, etc. Where heavier lumber, such as 2-inch plank and larger, railroad ties, etc., are sawed, we recommend our heavy-duty equipment, which will stand long and rough usage. (See illustration No. 785 at right.)

The standard or light weight conveyor is made up of 2-inch x 2-inch x 3/16-inch angle iron with cross ties electrically welded, making a very rigid construction. It comes in 10-foot sections, with the necessary connecting plates and bolts. Each section contains seven rolls, made of 1⅞-inch steel tubing, 15 inches long, spaced 18-inch centers. The supporting shaft is of ½-inch cold rolled steel, fitted with ball bearings.

The heavy-duty type is made up of 4-inch channel irons with cross-ties electrically welded: these are also furnished in 10-foot sections, with the necessary connecting plates and bolts. Each section contains seven rolls, of 2⅞-inch steel tubing 17 inches long, spaced 18-inch center. The shaft is of ¾-inch cold rolled steel and is fitted with ball bearings of size suitable to carry the load. The construction is very rugged and the equipment will stand hard usage.



Heavy-duty Conveyor



Frick No. 1 Mill Sawing Heavy Logs at Anchor Lumber Co., Marietta, Ohio.

What Users Say about Frick Sawmills and Accessories

Apex, N. C.

"The No. 00 mill, the power unit, and the gang edger with the ball bearing lumber conveyor which I bought from you made me a nice rig. We can cut from 8M to 12M feet per day. The Timken roller bearings on the mandrel and carriage axle also with a roller bearing edger makes the lightest running mill I ever used. It is very convenient to move and set up."

L. B. Penny.

Bowdon, Ga.

"I am 71 years old and have been using and operating sawmills ever since I was 15 years old and have used all kinds. I learned to saw on Frick sawmills, would not give them for any other mill. I have bought two new ones in last 25 years, they are both sawing now. If I was going to buy another mill it would be a Frick."

J. T. Harrod & Son.

Calhoun, La.

"From every standpoint, we are highly pleased with this mill, and we regret that we did not get acquainted with your men and your machinery several years ago, as it would have been quite a saving to us.

"We have visitors from all over the country, and they all say they have never seen such a complete operation as this little mill. We are operating this mill with three men less than the mill we owned

prior to this one, and cutting practically as much, or if anything more."

J. B. Brown Lumber Co.

College Park, Ga.

"We recently purchased from you an All Steel Frick Roller Bearing End Trimmer and just want to tell you how well pleased we are with it.

"It is accurate in trimming both ends of the lumber and also makes it look 100% better loaded on the trucks when it leaves the mill."

Stack Bros. Lumber Co.

Palmyra, Va.

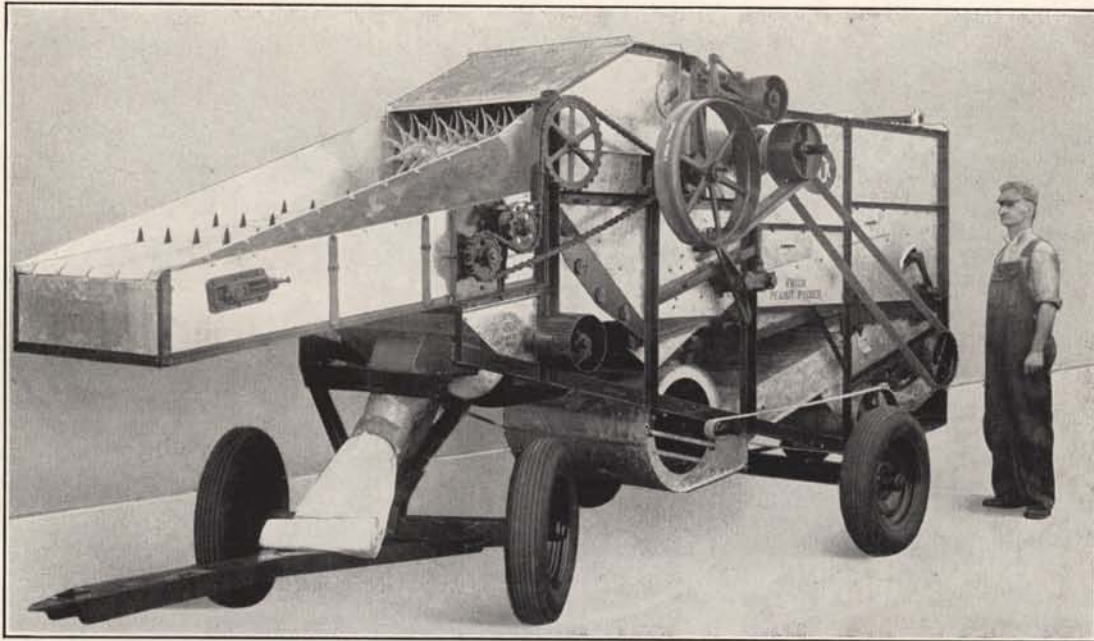
"I have one of your No. 00, 15' Frick Sawmills. Since putting a Power Unit and sawmill into operation I have been averaging around 12,000' of lumber per every eight hour working day. This Unit will not burn over three gallons of gasoline per hour, no matter how hard it is pulled."

R. B. Pace.

It was reported that all records for sawing hurricane timber in New England were broken by a No. 0 Frick sawmill on June 29, 1939. This mill was operating in Senexet Woods, Putman County, Conn.; it sawed 21,325 board feet of lumber in 6 hours and 42 minutes. The quality of the lumber was excellent. This production record was authenticated by a government scaler of the Northeastern Timber Salvage Administration.

Frick Equipment Includes

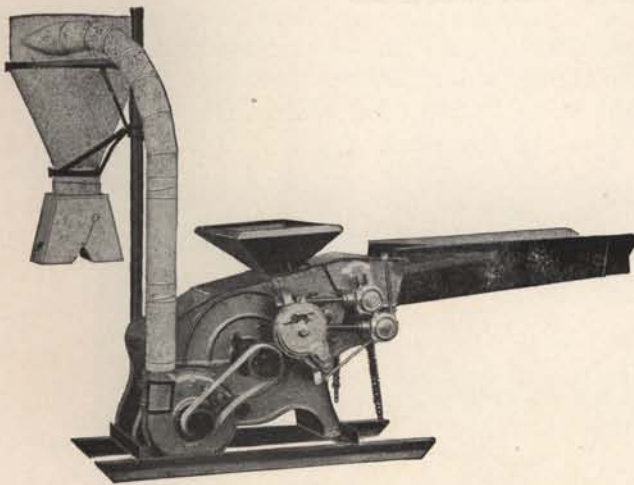
In addition to a complete line of power sawmills and accessories, farming equipment such as power units, threshers, combines, peanut pickers, tractors, pick-up cutters, silo fillers, balers, feed mills, husker-shredders, tractor plows, disc harrows, hay loaders, etc. Ask for special catalogs describing the items in which you are interested.



Frick Steel Peanut Pickers



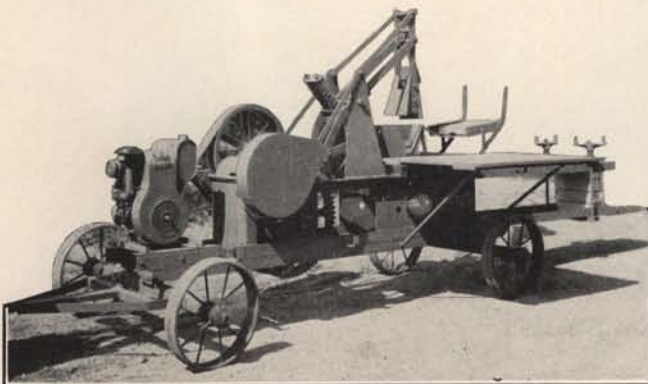
22 x 36 and 28 x 47 Frick Steel Threshers



Bear Cat Feed Grinders are Built in 5 Sizes



Rosenthal Steel 40 Corn Husker Shredder



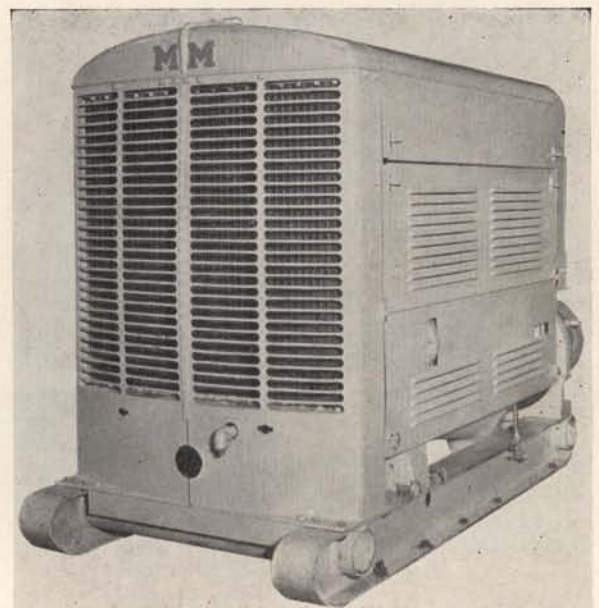
Frick 16" x 18" Baler



Fox Pick-up Cutter



M-M "GTB" Tractor



M-M Power Units

FRICK

Farm Machinery Division

BRANCHES

ATLANTA 3, GA.	712 Ponce de Leon Place
CANANDAIGUA, N. Y.	741 South Main Street
CHARLESTON 2, W. VA.	117 Virginia Street W.
COLUMBIA, S. C.	914 Washington Street
EASTON, PENNA.	2535 Wm. Penn Highway
GOLDSBORO, N. C.	South John Street
HARRISBURG, PENNA.	75 South Tenth Street
KNOXVILLE 7, TENN.	115-7 State Street
LATROBE, PENNA.	501-27 Lloyd Avenue
MONTGOMERY 2, ALA.	Molton and Tallapoosa Streets
RICHMOND 21, VA.	1716 Altamont Avenue
SALISBURY, N. C.	230 East Kerr Street
WILLIAMSPORT, PENNA.	Montoursville Road

WAYNESBORO, PA.
FRICK Co.