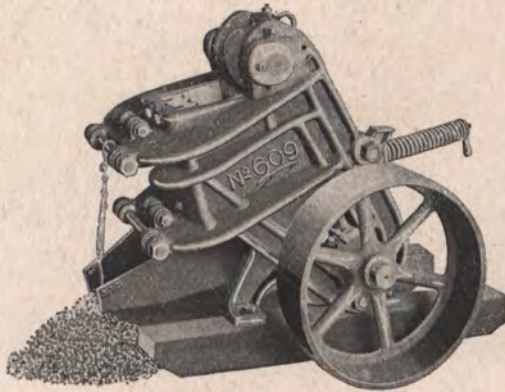


New Holland ROCK CRUSHERS



New Holland ROCK CRUSHER ON SKIDS



ANY SIZE DOWN TO DUST

NEW HOLLAND MACHINE CO.

New Holland, Pa., U. S. A.

New Holland Rock Crushers

New Holland Crushers are built in three types: Swinging Jaw for primary crushers, Roll Crushers for recrushing, and Hammer Crushers for clinkers, soft sand rock, or other material not easily handled by the Jaw or Roll type.

These Standard crushers are furnished separately or in combination for crushing and pulverizing gritty rock, making granules, pebble dash, chicken grit, sand, etc., or with Plate Pulverizers for crushing and pulverizing the average grade of lime rock or burnt lime for agricultural purposes.

Many *New Holland* Crushers are constantly in use throughout the United States and foreign countries crushing all kinds of rock into all sizes from road ballast and chips to fine grades for concrete. The average rock can be crushed to $\frac{3}{4}$ " size among which is a large proportion of very fine material and some sand. By using a shorter stroke on the main shaft, finer grades can be made if the maximum capacity is not required.

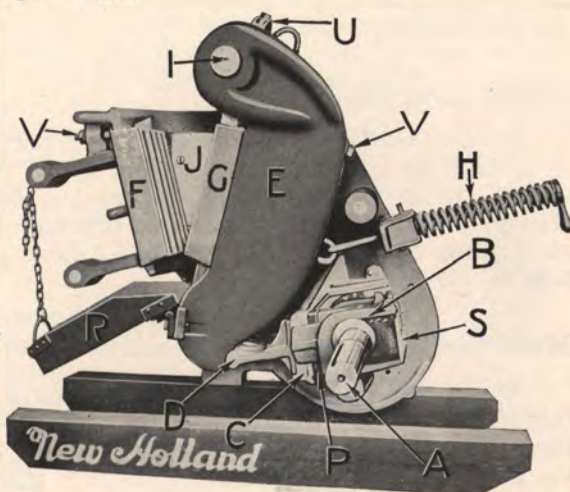
New Holland Crushers find a wide range of usefulness among contractors, miners, quarrymen, towns, industrial plants, farms, estates, clubs, colleges, cemeteries, etc.

Rock Crushers of the convenient sizes of the *New Holland* are frequently more profitable than larger machines on account of the limited amount of work to be done and small amount of labor and power required to run them to full capacity.

New Holland Crushers are built in sizes to crush from 1 to 12 tons per hour, are stationary or portable, with or without elevators or revolving screens.

Sectional View

- A—Main Crusher Shaft
- B—Eccentric Bearing
- C—Toggle Seat
- D—Safety Toggles
- E—Swing Arm
- F—Stationary Jaw
- G—Movable Jaw
- H—Swing Arm Spring
- I—Swing Arm Shaft
- J—Cheek Plates
- P—Toggle Seat Liners
- Q—Jaw Adjusting Jack



Frame

The Main Frame is made of semi-steel of deep rib construction. The ribs run in the direct line of the crushing strain, thus forming the greatest possible rigidity for the bearings and jaws. The frame cannot twist or bend, thus having an even pressure on the full length of the shaft bearings.

Swing Arm

The Swing Arm "E," to which the movable jaw "G" is attached, differs from all other rock crushers. It is made extra long and in box form. It extends far below the lower end of the jaws, thus obtaining a long leverage which reduces the pressure and friction on the main shaft bearings without the use of extra shafts, levers, etc.

The upper end of the Swing Arm "E" extends as far over the movable jaw "G" as is possible to make it, without interfering with the feeding of large stones in the crusher jaws. The shaft (I) is placed above and in line with the movable jaw (G). This is done because the best engineering theory as well as long practical experience, has shown that a swinging jaw crusher with the upper shaft located in this way, as it is in the *New Holland*, will grab and crush the stone much more rapidly and with less friction and wear on the jaws than when the shaft is placed further back.

Another important feature: Even though the bearings, through neglect, should wear, there is no lost motion in the crushing jaws. The tension spring (H) is attached to the arm between the upper and lower bearings and keeps the arm against the crushing side of the bearings, opening and closing the jaws the full length of the stroke.

Swing Arm Shaft

This shaft (I) is another important part of the *New Holland*. It is made of high carbon steel and firmly wedged in the upper end of the swing arm (E). It has the bearings in the main frame instead of in the arm. This prevents the jaw from tilting or twisting the arm in the frame if a hard rock is placed in one side of the jaws.

Main Shaft

The main shaft (A) is made of heavy, high carbon steel, turned and ground true to size, with a long eccentric bearing in the center reaching from one side of the main frame to the other.



Bearings

The *New Holland* Crushers have a high reputation for their bearings. They are made of the best quality of bearing metal, thoroughly protected from grit and dust and are fitted with large felt oiling pads, held constantly against the shaft by a mild spring, and thus lubricate the shaft at every revolution. The bearings on the *New Holland* will not heat unless neglected to oil.

The Main Frame of wide rib construction (E) permits extra long bearings on both sides of the Crusher, allowing the full width between the crusher frames for the eccentric bearing (B). The heavy high carbon steel shaft in the long rigid bearings will withstand the hardest crushing strain with the least possible friction and wear.



Eccentric Bearing

Safety Toggles

The Toggle (D) forms a connecting rod with universal joint between the lower end of the swing arm (E) and the eccentric bearing (B). The Toggles are made in different lengths to allow for a wide range of adjustment of the crushing jaws. They are slightly curved so as to buckle and break in case a sledge hammer should drop in the machine.



Safety Toggle

Toggle Seat

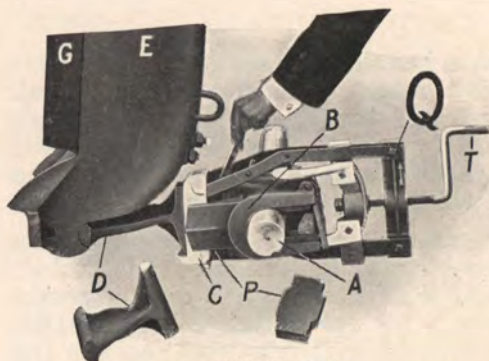
This seat (C) rests against the center of the eccentric bearing (B) and has a vertical bearing against which the one end of the toggle (D) rests, thus forming a universal joint in connection with the toggle between the crank shaft (A) and the swing arm (E). The vertical toggle seat resting against the center of the eccentric bearing applies the pressure evenly over the full length of the bearing.

Toggle Seat Liners

These liners are conveniently placed between the toggle seat (C) and the eccentric bearing (B), or removed to regulate the size of the crushed product. These liners make a solid permanent adjustment.



Toggle
Seat
Liners



Adjusting Jack

Jaw Adjustment

Each crusher is provided with a jaw adjusting jack (Q) to separate the toggle seat (C) and the eccentric bearing (B) for the purpose of inserting or removing the toggle seat liners (P).

Jaws (F and G)

New Holland Jaws are made extra heavy of special metal, chilled very hard and moulded under a pressure which gives them the greatest possible tenacity and strength to resist strain and wear. The Jaws are made in three styles: fine rib, coarse rib, and with high ribs in center and low ribs on each side. These extra hard jaws give years of service on the average grade of rock and are specially well adapted for crushing hard, gritty rock.

Each jaw is ground true on the back side to rest solid against the machined surface of the swing arm (E) or the crusher frame. Both jaws are alike. They are interchangeable and invertible. They are easily changed or replaced and are low in price. Manganese steel jaws can also be supplied from stock to those preferring them.

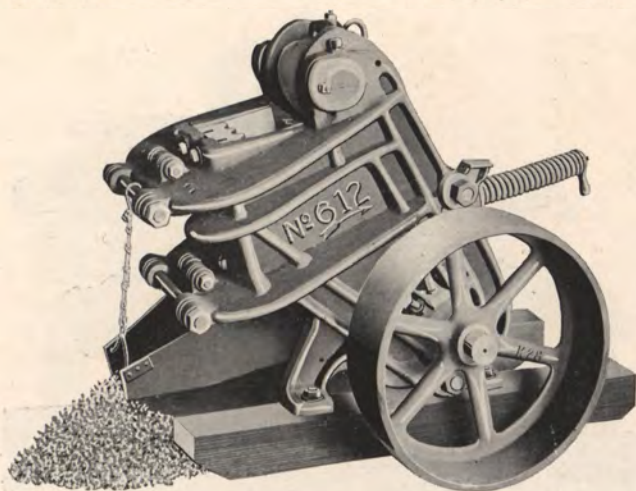
Tension Spring

On the *New Holland* this spring (H) is about twice as long as those generally used. This is very important. It opens the jaws easily and keeps the upper and lower ends of the swing arm firmly against its bearings, preventing lost motion without adding more pressure on the bearings than is necessary to have the jaw follow the eccentric bearing on the main shaft.

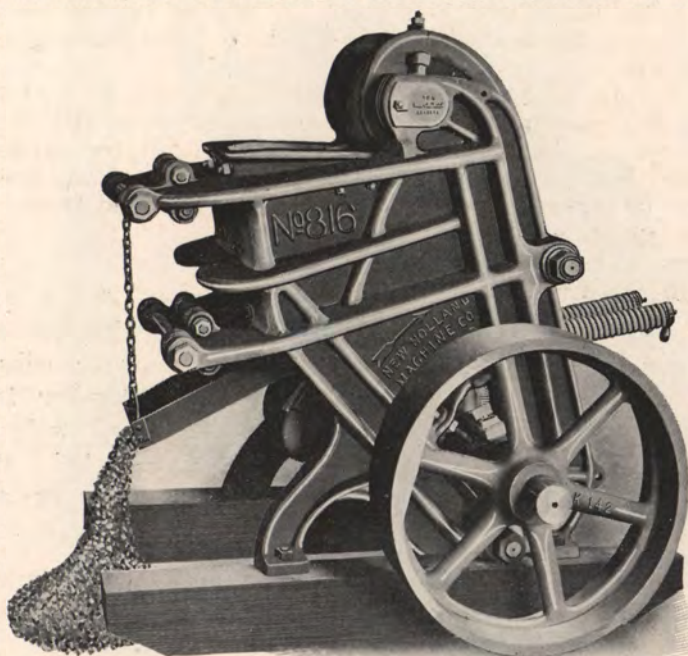
Cheek Plates

Cheek Plates (J) are subjected to the hardest kind of wear in all crushers. The *New Holland* Cheek Plates are made of the best quality, high carbon, tempered steel.

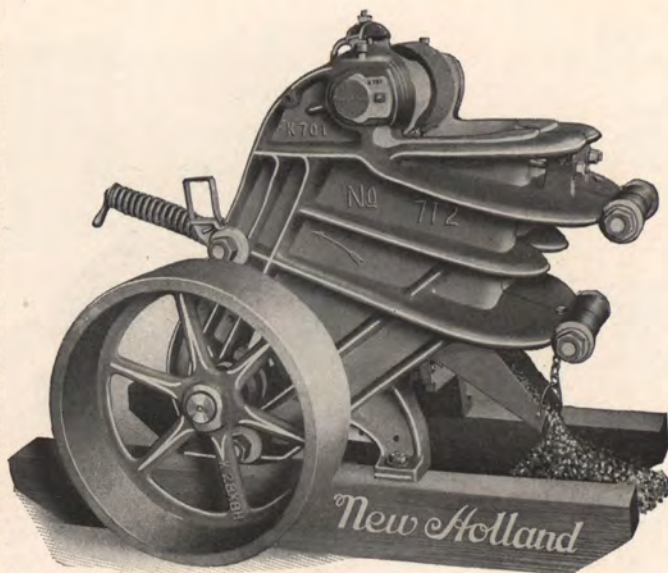
Long experience has taught us to avoid heavy cheek plates. Crushing hard gritty stone soon wears pockets into such plates, giving the chips a place to lodge and preventing the crusher working to full capacity. The thin, extra hard tempered plates wear longer than heavier plates of manganese steel or other metal.



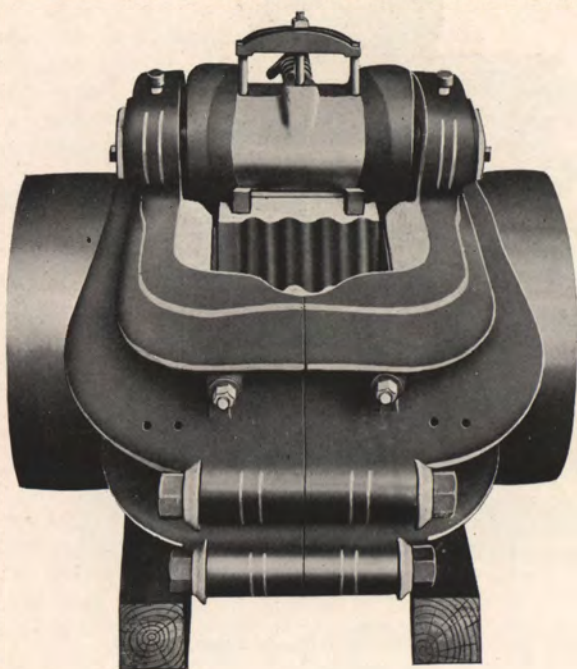
No. 612 CRUSHER on Sills with Jaw End Shaker Chute or Screen
6 x 9" Jaw Opening



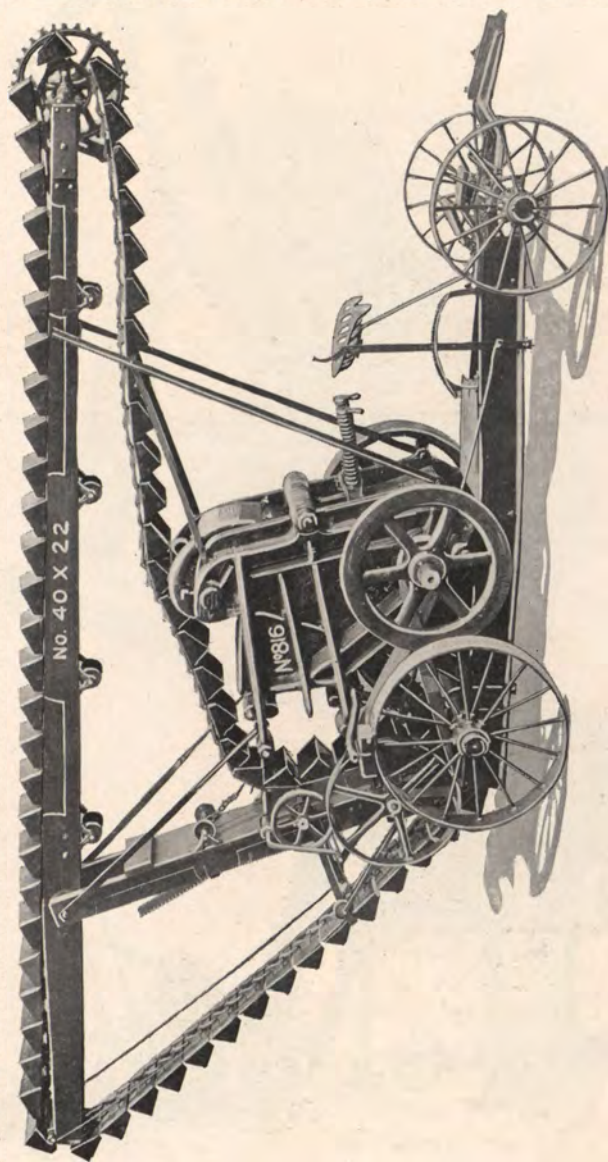
No. 816 CRUSHER on Sills with Jaw End Shaker Chute attached
8 x 16" Jaw Opening



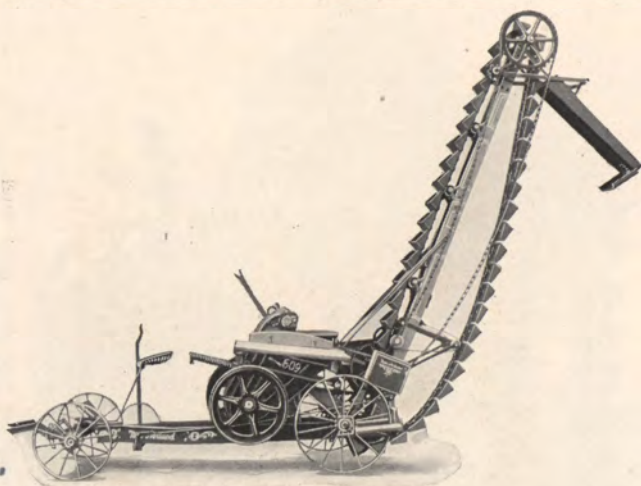
No. 712 CRUSHER on Sills with Jaw End Shaker Screen attached
7 x 12" Jaw Opening



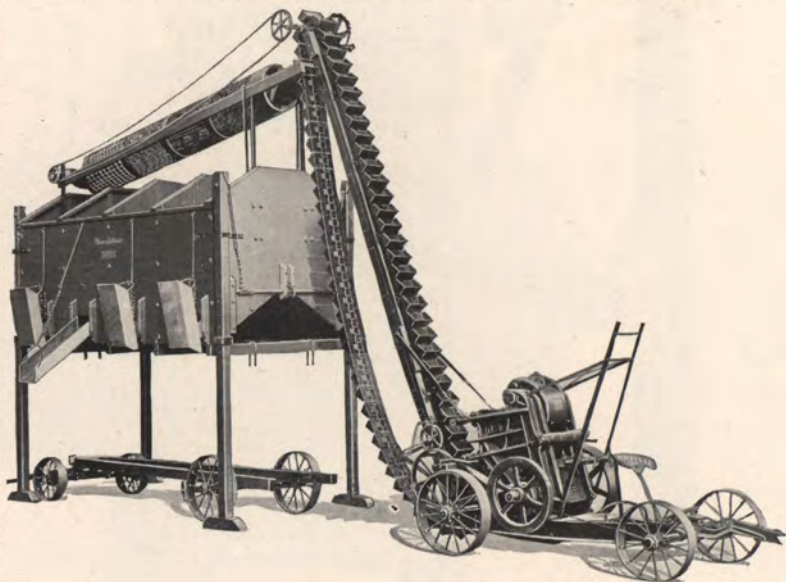
Top view
showing extra
wide ribs of
crusher frame
and wide sup-
ported swing
arm on shaft
(I).



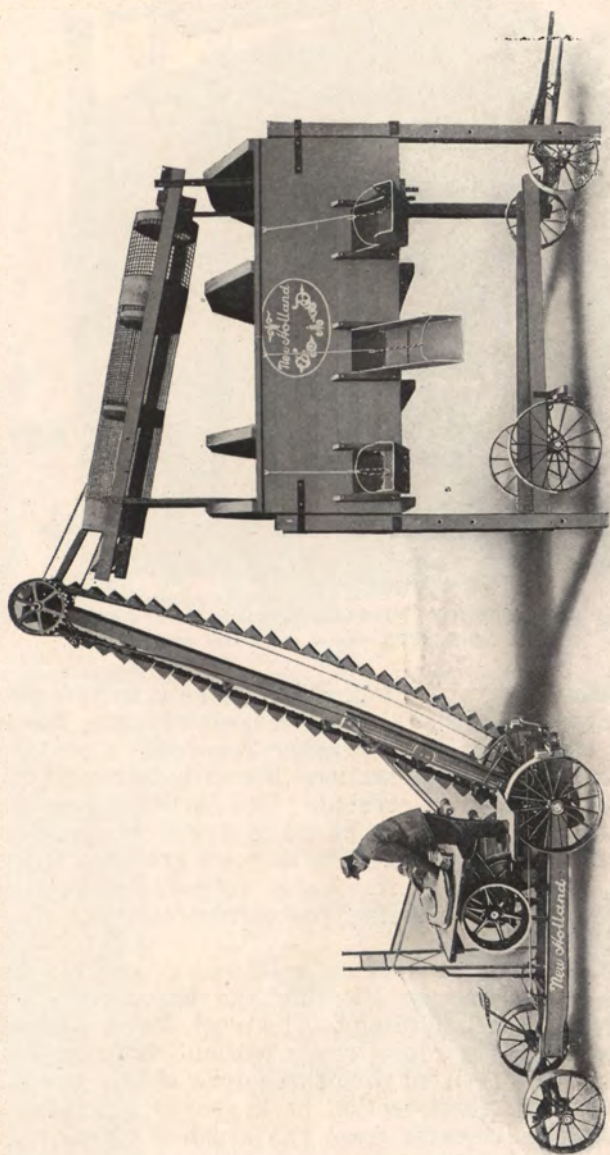
No. 816T OUTFIT—No. 816 Crusher with No. 40 22-ft. Elevator, Folded, Mounted on Low Down Steel Truck



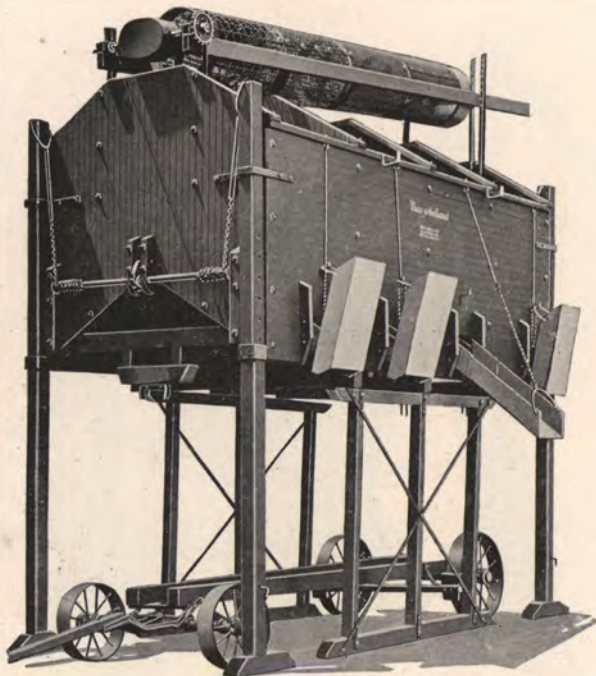
No. 609T, 612T and 712T OUTFIT—Using No. 609, 612 or 712 Crusher,
No. 30 14-ft. Folding Elevator and 4-ft. Chute Screen,
Mounted on No. 2 8-ft. Steel Truck



No. 816T OUTFIT operating with 25-ton portable bin with No. 24, 4-section revolving
screen with perforated sheet steel sections. Adapted for Townships or Contractors



No. 816T OUTFIT operating with 15-ton Portable Bin with No. 24 3-section Revolving Screen



New Holland 25-TON PORTABLE BIN with No. 24 4-SECTION
REVOLVING SCREEN erected and braced ready to go

New Holland Portable Stone Bins are built in two sizes: 15- and 25-ton capacity. Either size can be used with any ***New Holland*** Crusher or any other make crusher requiring a portable bin.

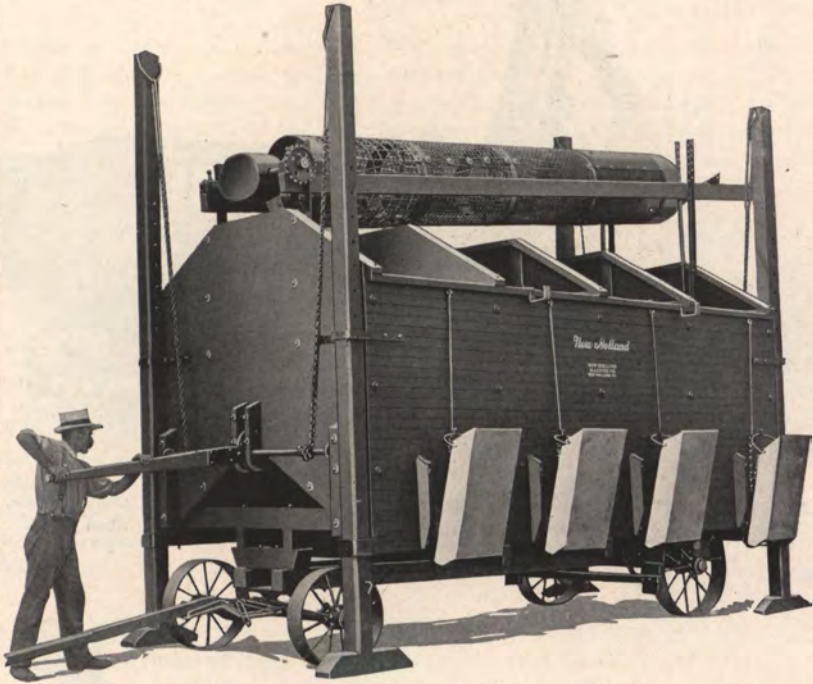
The bins are built in sections bolted together and can be shipped knocked down or erected. The partitions are movable, allowing each compartment to be made larger or smaller according to amount in each grade. The bottoms are lined with heavy sheet steel. The strong, removable supports under the bins when in use relieve the corner posts from carrying the heavy weight of the loaded bin.

A ratchet lever windlass on each end of the bin provides easy means of raising or lowering the bin from the truck. ***New Holland*** Bins when lowered on the truck for moving are low-down for hauling over rough roads without danger of tipping.

The 15-ton bin is fitted with three draw chutes on each side, and a No. 24 9-ft. three-section back geared revolving screen requiring a 19-ft. elevator from the crusher when the bin is raised the proper height to discharge into a truck.

The 25-ton Portable Bin has four draw chutes on each side and a No. 24 four-section back geared revolving screen, requiring a 22-ft. elevator from the crusher when the bin is raised the proper height to discharge into a truck.

Portable Bins



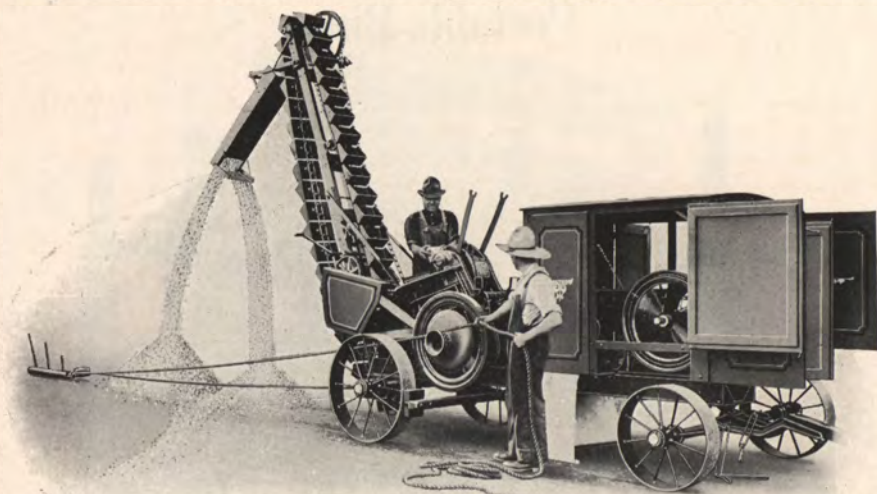
25-TON PORTABLE BIN WITH FOUR-SECTION REVOLVING SCREEN
Lowered on Wagon for Moving



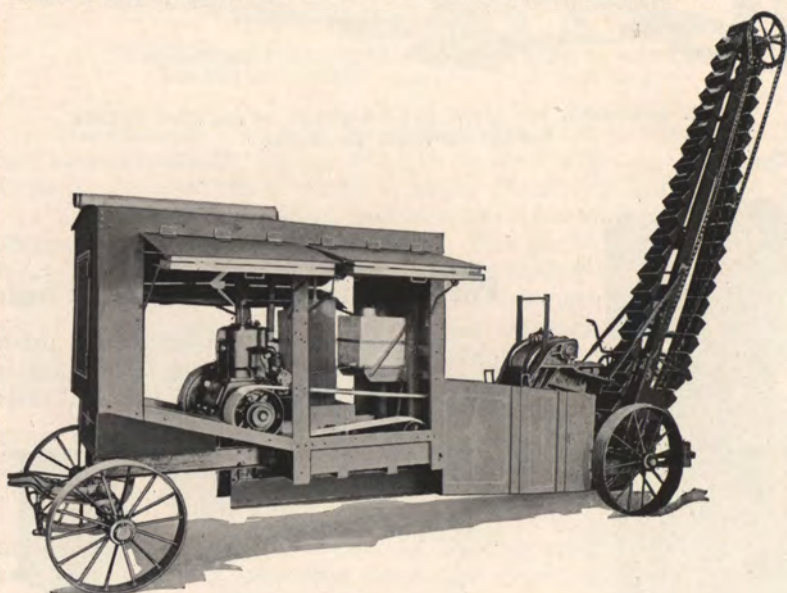
Portable and Stationary Bin Chute

New Holland Bin Chutes are made in two models: Swinging Draw Chutes 16" wide and Under Cut Draw Chutes 8" and 12" square. Both types are made of heavy sheet steel and are easily attached to any bin, either portable or stationary.





No. 30E OUTFIT—No. 609 Crusher, No. 30 12-ft. Folding Elevator, 4-ft. Chute Screen, 5 H.P. *New Holland* Engine, Engine House, Mounted on No. 3 11-ft. Steel Truck



No. 40E OUTFIT—No. 712 Crusher, No. 30 14-ft. Folding Elevator, Screen, Engine House, Mounted on No. 4 16-ft. Steel Truck, Suitable to Mount 15 to 20 H.P. Engine on Same Truck

Tabulation

					609	612	712				
Number of Crusher.....	609	612	712	816	20T	20T	20T	40T	30E	40E	
Size of Opening.....	6x9	6x12	7x12	8x16							
Capacity per hour (tons)...	1-3	2-4	3-6	4-10	1-3	2-4	3-6	4-10	2-3	3-6	
Horse Power required.....	4-6	4-6	10-15	15-25	4-6			15-25	4-6	10-15	
Weight of Crusher on Skids (lbs.)	2850	3060	6000	7700							
Weight of Crusher and Ele- vator on Truck.....(lbs.)					3700	4000	5500	9500	5800	8000	
Dia. of Main Crusher Pulley	26&35"	26&35"	27&35"	33"							
Face of Main Crusher Pulley	6"	6"	8"	8"							

New Holland Portable Stone Bins

	15-ton	25-ton
Number of compartments	3	4
Length over all	12 ft. 5"	14 ft. 8"
Width over all	8 ft. 8"	8 ft. 8"
Height over all when lowered.....	8 ft.	10 ft.
Height to chutes when raised.....	7 ft. 4"	7 ft. 4"
Weight with Truck.....	5388 lbs.	7400 lbs.

For tabulation on elevators and screens see elevator and screen sections of this catalog.

New Holland Crushers are used all over the United States and in foreign countries.

Guaranteed to do all we claim for them.

Simple and scientifically correct in design.

Large capacity.

High in quality.

Low in price.

New Holland Roll Crushers

New Holland Roll Crushers are designed for recrushing all kinds of crushed rock into finer grades for concrete aggregate, road chips, pebble dash, roofing granules, chicken grit, and sand, or for crushing cinders and slag for cinder blocks and brick. They are also used for crushing shale, slate, red dog, brick, old concrete, alloys, ore, etc.

These rolls are highly recommended to use in connection with jaw rock crushers for making finer grades than is possible to make with the jaw crusher only. The rolls are frequently used independent of jaw crusher to recrush crushed stone taken from stone bins or sand from sand pits or banks, cinders, and other material not too large for the rolls to take in.

For making fine grades of crushed stone with a jaw crusher, the jaws must be adjusted close together at the lower end, which will leave a narrow opening for the crushed material to drop through and then only when separated at short intervals, whereas the rolls running from 100 to 300 R.P.M. will carry the material through the same size opening at a much more rapid and constant rate.

By using one or more sets of rolls with a jaw crusher, the jaws can be separated, thus giving the jaw crusher a larger capacity, requiring less power, and not producing as much under-size or dust as with the jaw crusher only.

The rolls used in these No. 10 roll crushers are comparatively small in diameter and inexpensive, thus affording to use more units when required to reduce the material to fine grades; two sets of rolls 10" dia. require less power, wear longer, make a more uniform product, and cost less than one set of larger rolls making the same amount of reduction on any material.

Roll Construction

The rolls are made up from 3" high-carbon steel shafting upon which is cast a small roll of gray iron. This roll is turned to size and over it is placed a roll cylinder of special composition roll metal.

This roll shell can be replaced at a small cost, using the old shaft until worn out.

Roll Frame

New Holland Rolls have an 8" channel iron frame upon which the bearings are mounted.

The stationary bearing is bolted solid to the frame.

The adjustable bearing swings on a hinge providing easy adjustment for making different size material.

When a double set (4 rolls) are mounted to operate as one unit, the second set is placed directly under the first and on the same channel frame. Connecting gears drive the upper set from the lower set which is belt driven.

Bearings

The Roll Bearings are 8" long and are lined with high grade anti-friction metal.

A double oil reservoir with wick oil pads oil the bearing and shaft at every revolution.

Bearing trouble is unknown on *New Holland* Rolls if oil is kept in the reservoir.

Adjustment

The rolls are held apart by spacers or shims and held together by tension rods and heavy coil springs.

Extra shims and gears with each set of rolls provide adjustment from 1½" down to ¼".

The tension rods carry most of the crushing strain and the steel coil springs permit the rolls to open up and allow iron or any very hard substance to pass through without doing any serious damage.

New Holland Rolls are both run at the same speed or nearly so, to avoid the rubbing process which causes excessive wear.

Single roll units make from ¼" to ½" reduction depending on the hardness and nature of the material.

On soft sand rock units are often arranged in one, two, three, or four single sets in tandem, mounted on an incline, with a screen following each set to screen out the finished product after each reduction and carry it by chute to the bottom of the incline to be elevated and screened; the rejects being returned to the rolls for further reduction. This arrangement makes the best sand leaving the grains in their natural granular formation with a minimum of dust.

Force Feed Hopper

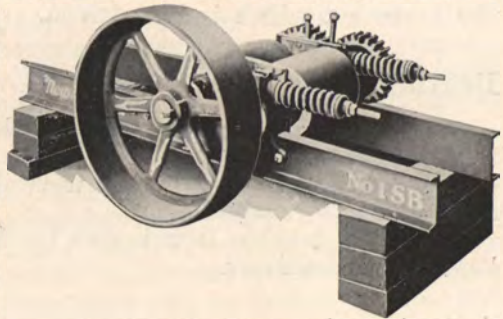
A hopper with force feed roll is used on top of the rolls when drawing from a bin or other source that does not give an even flow. This gives an even continuous supply to the rolls and distributes the material the full length of the rolls, keeping the roll surface even and a constant load on the power.

Power

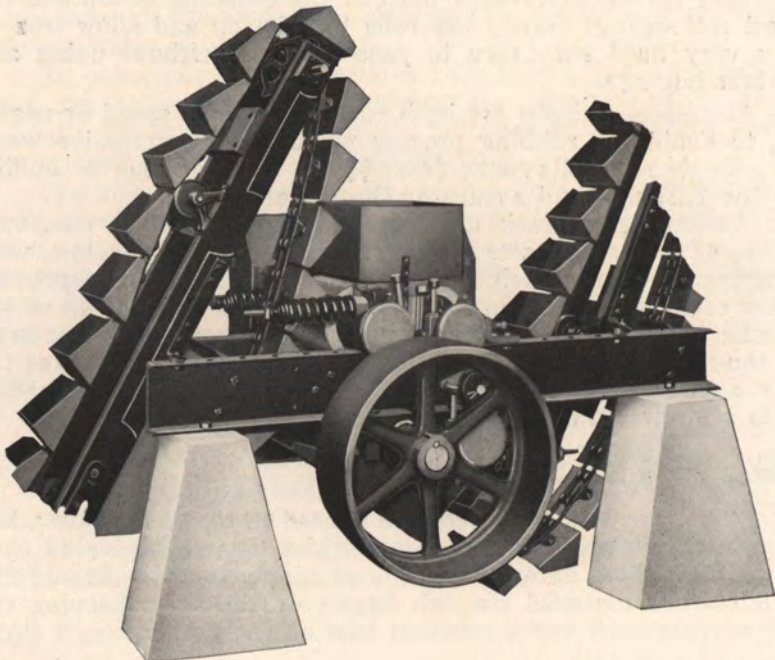
Roll Crushers when properly adjusted do more work, make a more uniform product and require less power than any other type crusher.

No. 10 *New Holland* Roll Crushers

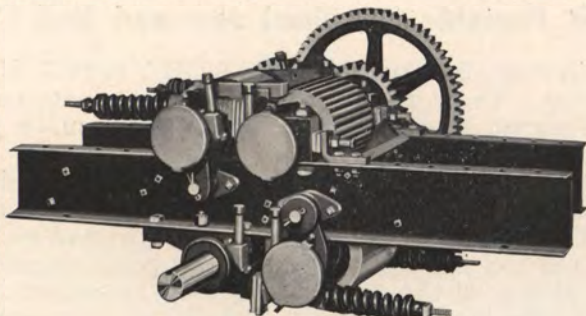
These No. 10 roll crushers are fitted with coarse ribbed, fine ribbed or smooth rolls according to the fineness of grades wanted. They are furnished with the belt pulley on either side.



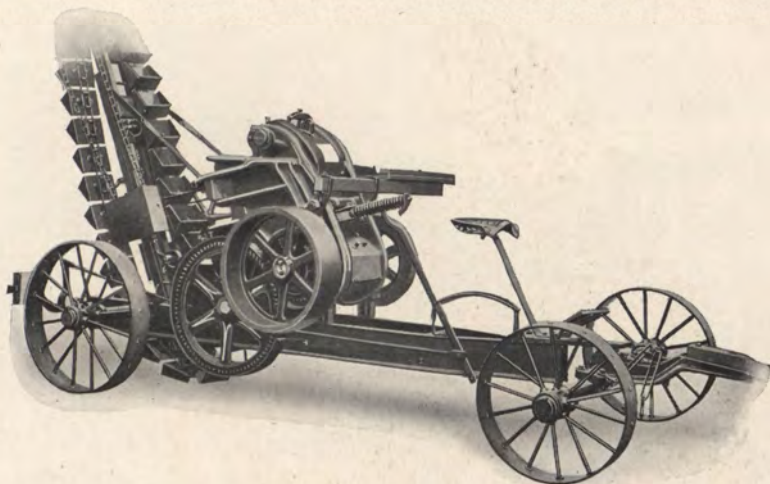
No. 10A12 Single Set Rolls 12" long
No. 10A16 Single Set Rolls 16" long



No. 10B ROLLS with housing and hopper in place, fitted with charging and discharging elevators



No. 10B12 Double Set Rolls 12" long
 No. 10B16 Double Set Rolls 16" long
 Right hand side view



Nos. 609AT, 612AT and 712AT CRUSHING OUTETS consisting of CRUSHER with ONE SET No. 10A12 RECRUSHING ROLLS geared to the crusher, No. 30 14-ft. folding elevator mounted on No. 4 11-ft. low down truck, suitable for making fine grades for blocks, all kinds of concrete material and sand.

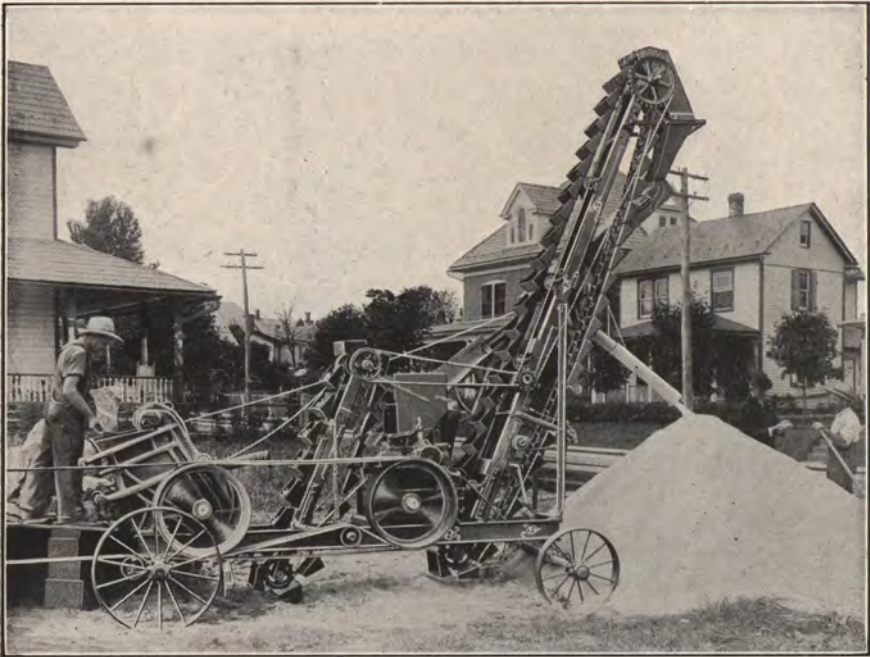
Can be used with chute, jolter or revolving screen.

New Holland Portable Combined Jaw and Roll Crushers

Built in four sizes known as No. 609BT, 612BT, 712BT and 816BT outfits. These are complete crushing plants on wheels, specially designed to make finer grades than can be produced with jaw crushers only.

These machines are fitted with smooth or ribbed rolls or some of each depending on the kind of material and reduction wanted. They will crush all kinds of rock for road making and concrete work and make sand for building purposes, etc.

The capacity of the crusher is greatly increased on the 1" and finer grades by running the crushed stone through the re-crushing rolls. The coarser grades can be crushed and directed from the short elevator into the long elevator without the use of rolls whenever so desired.

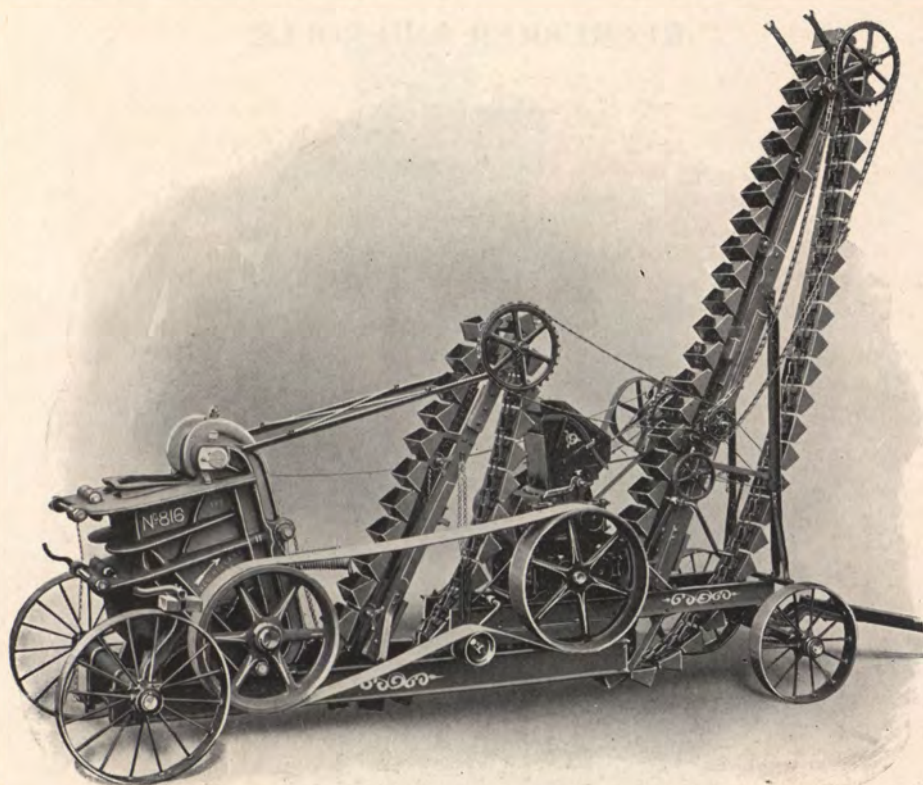


No. 609BT, 612BT and 712BT Crushing Outfit

This machine is furnished with No. 609, 612 or 712 *New Holland* Jaw Crusher, No. 10B12 Roll Crusher, and 14-ft. Folding Elevator.

For making all grades from fine sand up to $\frac{3}{4}$ " screen size or up to $2\frac{1}{2}$ " size by using crusher only and by-passing the rolls.

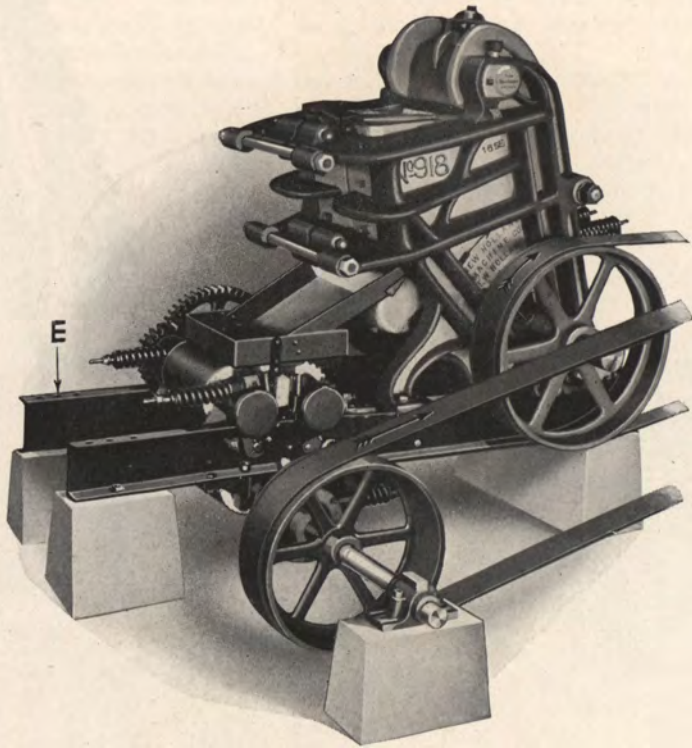
For making all sand a jolt or revolving screen is used and so arranged that the oversize can be returned to the rolls for further reduction.



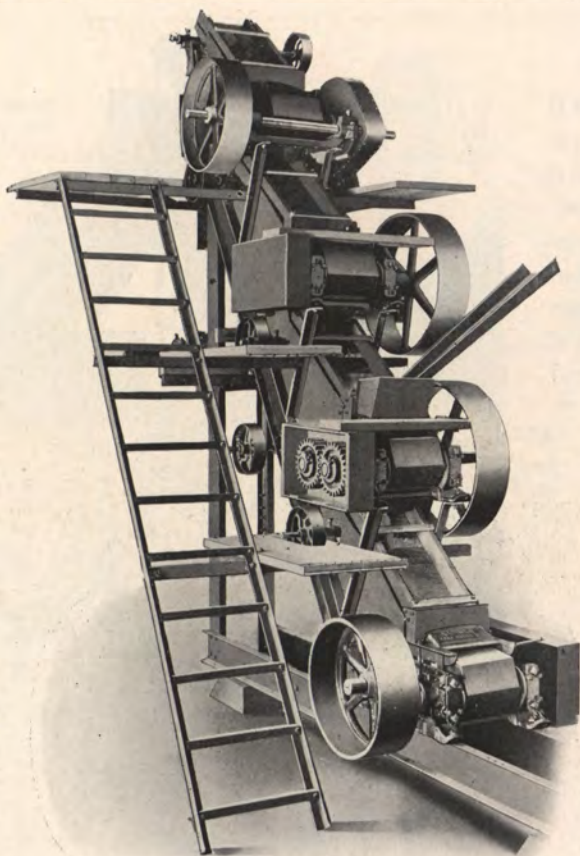
No. 816BT PORTABLE CRUSHING OUTFIT fitted with No. 816 Crusher and No. 10B16 Rolls and 14 to 22-ft. Folding Elevator. While it is possible to make extra fine grade sand with this machine, the crusher has too large a capacity for the rolls to reduce the entire product to finer grades than $\frac{1}{2}$ " screen size. In other words, the smaller outfits will have the same capacity as this larger machine on fine building sand.

This machine is especially well adapted for making chips for state highways or for crushing all kinds of rock for all purposes down to $\frac{1}{2}$ " screen size. When crushing the coarser grades for road ballast, etc., the product can be directed from the top of the short elevator directly into the long elevator and the rolls remain idle.

RECRUSHER AND ROLLS

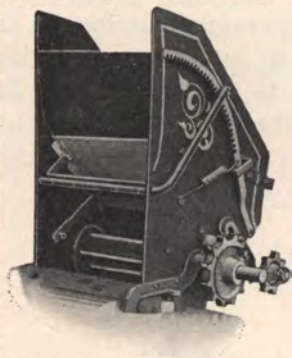


Represents crusher of any size discharging directly into a double set of rolls; showing also a flexible coupling, extended shaft, pillow block and pulley placed to one side so as to permit the belt to pass the crusher flywheel. Both crusher and rolls are here shown driven from line shaft. When desired, the extended shaft can be attached to the crusher shaft in place of the roll shaft.



No. 4 SINGLE UNIT SAND ROLLS arranged tandem on an incline with screens following each unit and chute carrying screened product to bottom of incline to an elevator to be screened; the oversize being returned to the rolls for further reduction. A complete sand plant includes jaw crusher, elevator and jolt or revolving screens.

No. 10 B
Rolls with
force feed
hopper, ver-
tical belt ele-
vator and
jolt screen
being used
in a sand
quarry.



Nos. 1 and 2 Force Feed Hopper
used on No. 10B Rolls.

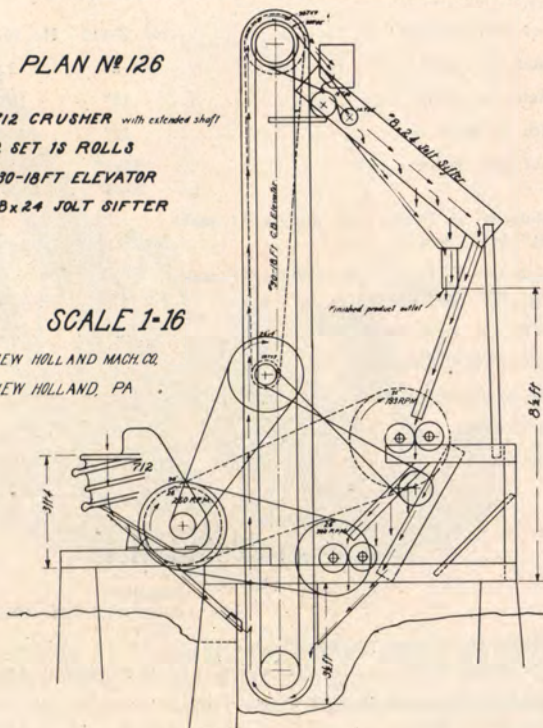
No. 712 CRUSHER
with EXTENDED
SHAFT, TWO
SETS No. 10A
ROLLS, No. 30BV
18-ft. ELEVATOR,
and No. 41 JOLT
SCREEN with Re-
turn System for
making sand.

PLAN N° 126

712 CRUSHER with extended shaft
2 SET 18 ROLLS
*30-18FT ELEVATOR
*8x24 JOLT SIFTER

SCALE 1-16

NEW HOLLAND MACH CO.
NEW HOLLAND, PA



No. 41 JOLT SCREEN FRAME
as used with Plan 126.

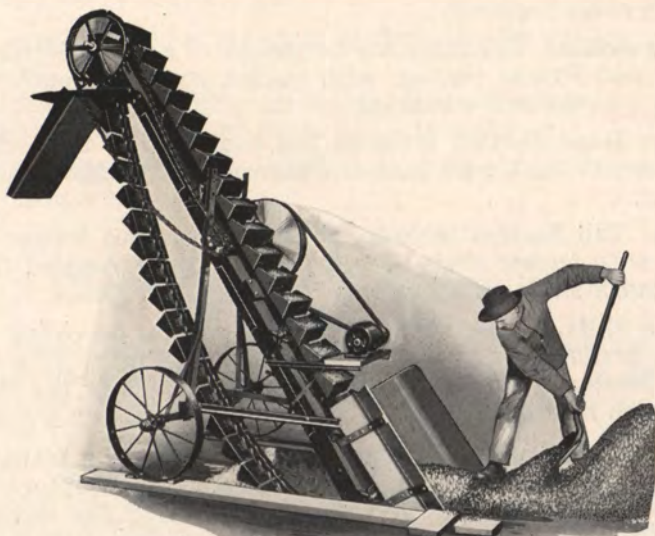
Tabulation

No. of Roll Crusher.....	No. 10A12	No. 10A16	No. 10B12	No. 10B16
Amount of Rolls.....	2	2	4	4
Diameter of Rolls.....	10"	10"	10"	10"
Length of Rolls.....	12"	16"	12"	16"
Size of Belt Pulley.....	26x6" 35x6"	26x6" 35x6"	26x8" 35x8"	26x8" 35x8"
Revolutions of Pulley per minute to make ¾" to 2" grades.....	100 to 125	100 to 125	200 to 300	200 to 300
Revolutions of Pulley per minute to make ½" and finer grades.....	200 to 300	200 to 300	200 to 300	200 to 300
Diameter of Roll Shafts.....	3"	3"	3"	3"
Length of Roll Bearings.....	8"	8"	8"	8"
Length of Standard Sills.....	6 ft.	6 ft.	6 ft.	6 ft.
Space Between Sills.....	16⅜"	20⅜"	16⅜"	20⅜"
Weight on Sills.....	1700 lbs.	1800 lbs.	3140 lbs.	3340 lbs.

Tabulation

	Capacity tons per hour	R.P.M.	H.P.	Wt. Lbs.	Pulley
No. 609AT Outfit with No. 609 Crusher and No. 10A12 Rolls.....	1 to 2	250	4 to 6	4500	26 or 35x6"
No. 612AT Outfit with No. 612 Crusher and No. 10A12 Rolls.....	2 to 3	to	4 to 6	4700	26 or 35x6"
No. 712AT Outfit with No. 712 Crusher and No. 10A12 Rolls.....	3 to 6	300	10 to 15	5300	27 or 35x8"
No. 609BT Outfit with No. 609 Crusher and No. 10B12 Rolls.....	2 to 3	250	10 to 15	7000	26x8
No. 612BT Outfit with No. 612 Crusher and No. 10B12 Rolls.....	2 to 4	to	10 to 15	7200	26x8
No. 712BT Outfit with No. 712 Crusher and No. 10B12 Rolls.....	3 to 6	300	15 to 25	10200	35x8 or 26x8"
No. 816BT Outfit with No. 816 Crusher and No. 10B16 Rolls.....	4 to 10	225 to 275	15 to 25	12500	35x8

New Holland Vertical and Incline Elevators



New Holland Portable Loading Elevator, driven by small electric motor with loading hopper and 4-ft. chute screen. Made with any of our standard elevators and furnished complete with motor.

New Holland Elevators are built in all sizes from 6 to 60 feet with capacities up to 75 tons per hour, suitable for all kinds of material from sand up to anything that can be carried in an 18x11½x8" bucket.

New Holland Elevators are suitable for any make crusher or for elevating from pockets or piles for heavy or light duty, incline or vertical with buckets bolted to either chain or belt. Belt is mostly used in preference to chain for sand or other gritty or abrasive material.

Incline Elevators have continuous buckets. Vertical elevators have the buckets spaced one foot apart (standard) and closer or farther apart for smaller or greater capacity.

Capacities of *New Holland* Elevators are based on standard spacing of buckets with material weighing 100 lbs. per cubic foot and moving 140 feet per minute for incline elevators, and 172 feet per minute for vertical elevators.

For light material, much larger buckets than standard may be used without undue strain on the chain or bearings.

All heavy duty elevators are equipped with extra long bearings lined with high grade babbitt metal and fitted with felt pad oilers to insure continuous lubrication.

Short, light duty elevators have hard wood bearings which require practically no oiling, give excellent service and if necessary are easily replaced.

New Holland Elevators are composed of a Head Section, Tail Section and Frame Section with bucket carriers, countershaft, and with or without windlass.

The Head Section includes the bearings on a short wood frame, head shaft with bucket chain or belt pulley and driven sprocket.

The Tail Section includes the bearings on a longer frame section with bucket chain or belt pulley, lugs to support the elevator and a shift section.

The Shift Section slides in the tail section providing a convenient arrangement to keep the bucket chain or belt at the proper tension. With a rack and lever attached to the elevator the tension may be adjusted while running or at any other time.

The bucket carriers properly spaced along the frame form an even rolling surface for the buckets. The countershaft is placed at a suitable distance from the bottom of the elevator, is driven from either crusher pulley, roll pulley, line shaft pulley or motor pulley by belt. A small sprocket on the countershaft drives by chain a larger sprocket on the head shaft. On long, heavy duty elevators a second countershaft with two short drive chains instead of one long chain is often used.

When necessary on heavy duty elevators a tight and loose pulley can be used on the countershaft.

On portable folding elevators, from 10 to 22 feet, a geared hoist makes it easy for one man to quickly raise or lower the elevator. Where conditions permit it is more satisfactory and economical to use two 25-ft. or two 50-ft. elevators in tandem than one 50- or 100-ft. elevator. The heavy weight of the long string of buckets and chain is hard on bearings, very straining on chain links and uses more power than two shorter elevators.

When using two elevators in tandem the lower elevator extends about two feet above the bottom of the upper elevator and empties by a chute or pocket directly into the upper elevator buckets. On vertical elevators a boot is used to catch any drippings.

Whatever crusher or equipment you have, if you need an elevator you can use a **New Holland**.

We can furnish from stock, head and tail sections with shift section complete with sprockets, bearings, etc., for vertical or incline elevators, bucket carriers, chain and buckets, etc.

Our slogan: "Help those that can help themselves or build it complete for those who have neither time, talent or inclination."

Our tabulation is for regular, standard equipment generally used for sand or crushed rock.

For other lighter material, larger buckets will increase the capacity.

Almost any condition can be met by a variation in combining of *New Holland* standard parts and Elevators.

Our engineering department can help you with your problems if you write them.

New Holland Belt Conveyors

A *New Holland* Belt Conveyor is a convenient vehicle for carrying many kinds of material horizontally or up an incline from horizontal to 20 or 30 degrees depending on the nature and condition of the material.

Belt Conveyors are easily installed, require little power and when equipped with a *New Holland* loader the upkeep is less than any other method of conveyance.

A *New Holland* Loader is an adjustable hopper and chute that delivers the material on the belt at belt speed and distributes it the full width of the belt.

New Holland Belt Conveyors are built for light and heavy duty in sizes from 5 to 50 feet long and equipped with belts from 6" to 24" with capacities up to 75 tons per hour. A simple shift section keeps the proper tension on the belt. Incline and horizontal roller carriers form a trough of the belt. The carriers have adjustable bearings to control and guide the belt. Felt oilers thoroughly lubricate the bearings on the carriers and head and tail shaft on all heavy duty conveyors. For light duty either canvas, rubber or maxecon conveyor belt may be used; for heavy duty or where the material is abrasive or has sharp cutting edges we recommend maxecon conveyor belt or sufficient coating to insure satisfactory service. All conveyors are listed without belt allowing the user to select the kind best suited to his conditions. All belts listed to be on *New Holland* Conveyors are carried in stock or easily obtained on short notice.

No. of Elevator.....	No. OB	20CI	30CI	34CI	40CI	50CI	60CI	20CV	30CV	40CV	50CV	60CV
	BELT	CHAIN INCLINE						CHAIN VERTICAL				
Size of Buckets.....	8"	8"	10"	10"	10&12"	12"	18"	6"	8"	10"	12"	18"
No. of Buckets per foot....	1½	1	1½	1½	1½	1½	1	1	1	1	1	1
Maximum Capacity	6	6	15	20	20	30	75	6	15	20	40	75
No. of Bucket Chain.....		67	83	85	85	C102	(2)C102	67	83	85	C102	(2)C102
No. of Drive Chain.....	45	45	57	57	77	88	88	45	57	77	88	88
Dia. Head Shaft	1"	1"	1¼"	1¼"	1½"	2"	2½"	1"	1¼"	1½"	2"	2½"
Dia. Tail Shaft	1"	1"	1¼"	1¼"	1¼"	2"	2"	1"	1¼"	1¼"	2"	2"
Dia. Countershaft	1"	1"	1¼"	1¼"	1¼"	2"	2"	1"	1¼"	1¼"	2"	2"
R.P.M. Countershaft	100	100	100	100	100	100	75	130	130	130	130	130
R.P.M. Headshaft	45	45	45	45	45	45	25	30	30	30	30	30
Angle of Incline.....	23°	23°	23°	23°	23°	23°	23°	VERTICAL				
Speed of Bucket Chain.....	140	140	140	140	140	140	140	172	172	172	172	172
Minimum Length (ft.)....	10	6	10	10	10	10	10	6	10	10	10	10
Maximum Length (ft.)....	10	20	25	25	30	50	60	25	40	40	50	60
Width of Rubber Belt (ins.)	6	6	8	8	8	8-12	12-16	4	6	8	8-12	12-16
Ply of Rubber Belt (ins.)..	4	6	6	6	6	6	6	4	6	6	6	6

For sand, cinders and other gritty material rubber belt is often used instead of chain. Our elevators are built either way. The price will be the difference between the price of belt and chain, to which the buckets are bolted and head and tail sprockets and pulleys.

Tabulation of *New Holland* Belt Conveyors Fitted With Canvas, Rubber or Maxecon Conveyor Belt

No. of Belt Conveyor.....	20B	30B	40B	50B
Width of Belt (inches).....	5 to 10 ft. 6, 8 or 12" 10 to 20 ft. 6"	10 to 20 ft. 8 or 12" 15 to 30 ft. 8"	10 to 20 ft. 8 or 12" 12 to 40 ft. 8"	10 to 20 ft. 12, 16 or 20" 12 to 50 ft. 12, 16, 20, 24"
Ply of Belt.....	4 ply for all widths up to 16 ft. lengths, 6 ply for longer. See paragraph on "Selecting Belt for Conveyor"			
No. of Drive Chain.....	45	57	77	88
Maximum Capacity	6"-8"-12"	8"-12"	8"-12"-16"	12"-16"-20"
Tons Per Hour.....	5-12-30	12-30	12-30-45	30-45-75
Diameter Head Shaft (inch)...	1	1¼	1½	2
Diameter Tail Shaft (inch)....	1	1¼	1¼	2
Diameter of Belt Pulley.....	6, 8 or 12"	8" or 12"	8" or 12"	12, 16 or 20"
Diameter Countershaft	1"	1¼"	1¼"	2"
Size Pulley on Countershaft...	16x3x1"	20x4x1¼"	24x4x1¼"	26x6x2"
Size Sprocket on Countershaft.	8T45x1"	12T57x1¼"	12T77x1¼"	11T88x2"
Size Sprocket on Head Shaft...	30T45x1"	30T57x1¼"	30T77x1½"	28T88x2"
Rev. per Min. Head Shaft.....	40	40	40	40
Rev. per Min. Countershaft ...	100	100	100	100
Angle of Elevation.....	up to 20°	up to 20°	up to 20°	up to 20°
H. P. Required.....	1 to 2	1 to 2	2 to 6	2 to 6

Capacity of Belt Conveyors in tons per hour:

Carrying material weighing 100 lbs. per C ft. and moving 125 ft. per minute.

6" — 5 tons
 8" — 12 tons
 12" — 30 tons
 16" — 45 tons
 20" — 75 tons
 24" — 100 tons

Screens

New Holland Screens are made in three models: REVOLVING, JOLTING, and CHUTE.

CHUTE SCREENS are made in three sizes: Nos. 0, 1 and 2, to fit the different elevators and are intended to make two grades of material. They are fitted with any size mesh screen desired or a solid bottom if all grades are to be run together.



4-ft. CHUTE SCREEN

Jolting Screens

New Holland Jolt Screens are designed especially for screening very fine material and sand.

The End Jolt will dislodge the small particles in the meshes of the fine wire cloth and keep them open when all other methods fail.

If the material is screenable a *New Holland* JOLTER will do it.

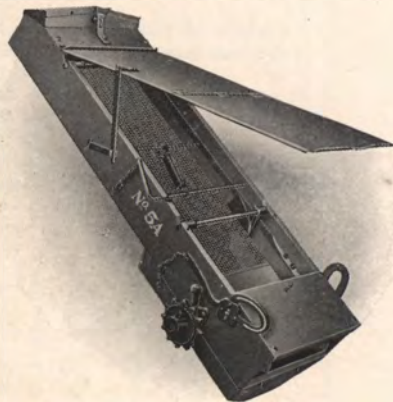


No. 10 JOLT SCREEN

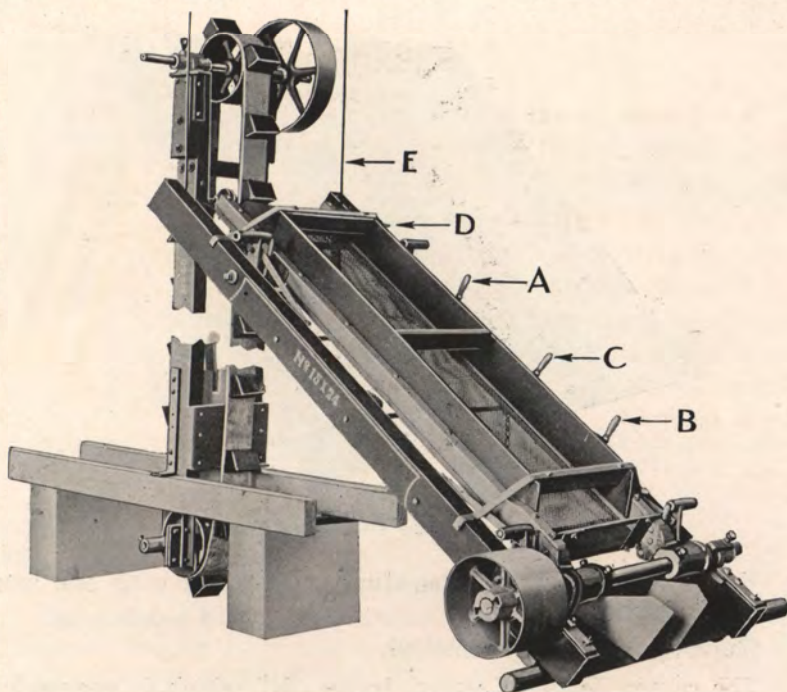
For damp or very fine product they are far superior to shaker, vibrating, revolving or any other type screen. They are used extensively in the manufacture of slate granules, stone meal for agricultural purposes, pebble dash, oyster shell grit, sand, etc.

The Jolt Screens are suspended in the Jolt Frame on hangers and are adjustable for "Throw" and "Jolt." The adjustments are made while running to suit the material whether dry, damp, coarse, or fine.

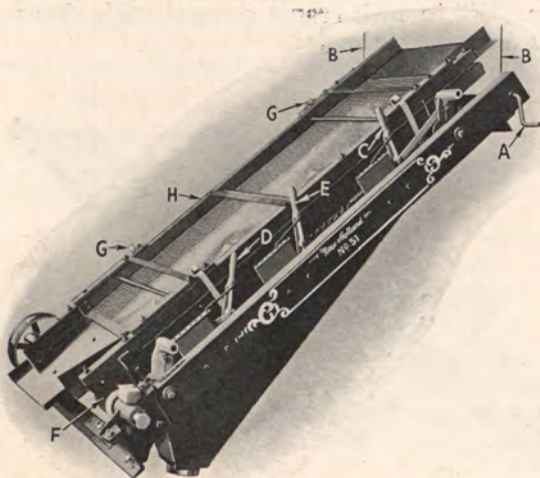
Try a *New Holland* Jolter for "Safety First" and avoid delay and disappointment.



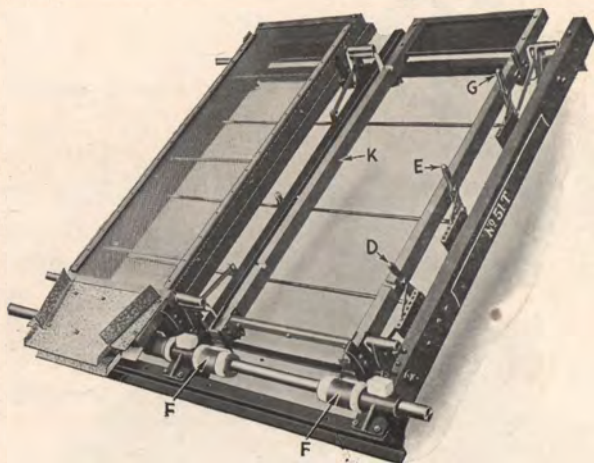
No. 31 JOLT SCREEN



No. 41 *New Holland* JOLT SCREEN Showing Position for Operating with
No. 40 Vertical Cup Bucket Elevator



No. 51 *New Holland* JOLT SCREEN
Showing Bottom Hopper



No. 51T *New Hollana* TWIN JOLT SCREEN

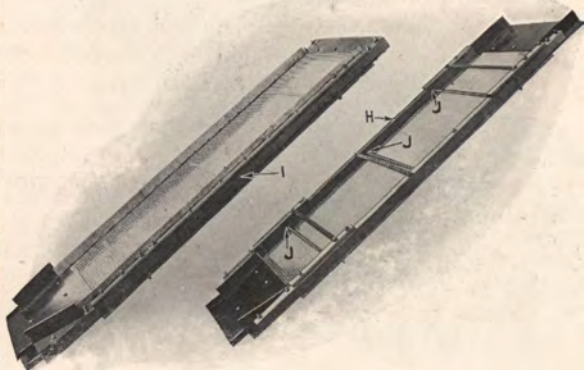
Two complete screens operating as one unit with one long cam shaft for both screens.

Showing one screen removed.

The screen rests on screen frame "K" which is suspended on hangers in the main frame.

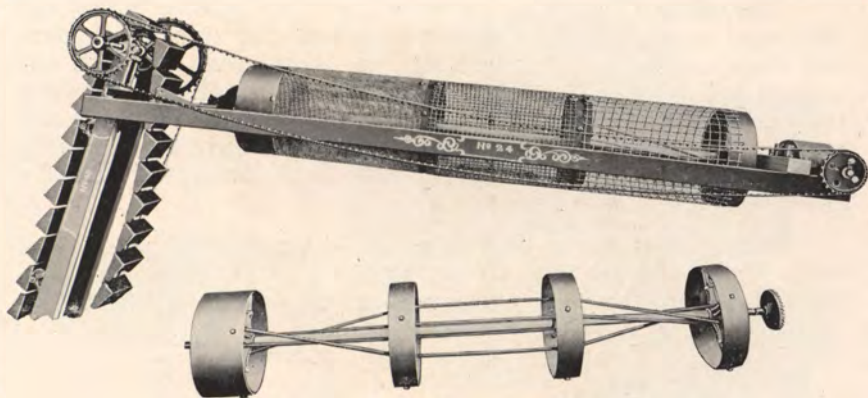
Adjusting Levers "D," "E" and "G" control the throw and jolt.

Two cams "F" to each frame connect with shoes on the end of the frame and make the jolt.



SCREENS FOR No. 51 JOLTER

"J" shows expansion rods to keep wire cloth stretched.



REVOLVING SCREEN with Upper End of Elevator Attached and Screen Frame,
Showing Truss Rods

Revolving Screens

New Holland Revolving Screens are made in 24", 30" and 40" diameters, having 2, 3, and 4 sections. These screens are designed to screen crushed rock, sand, gravel, coal, coke, cinders, slag, ashes, foundry sand, etc. They are equipped to make all grades from 3" or 4" size down to sand and dust.

These screens are made in two styles: Back Geared and Direct Drive. The Geared Screens are connected in direct line with the elevator either tandem or parallel.

The Direct Drive Screens are connected at right angle with the elevator to either side.

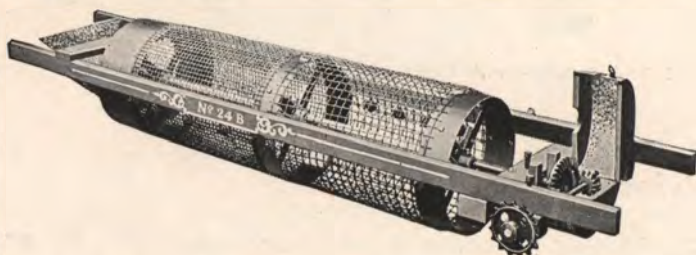
Both styles are driven from the elevator head shaft. Screens are fitted with heavy hardened steel wire cloth or perforated (round hole) sheets, or some of both kind.

For fine material the wire cloth has the largest screening capacity and less tendency to clog. For larger sizes the perforated sheets are the more durable. For state road work round hole perforated sheets are generally used.

No. 24 Screens are fitted with heavy hardened wire cloth with openings up to 2". Larger than 2" perforated sheet steel is used. Nos. 30 and 40 Screens are fitted with perforated sheet steel unless ordered otherwise.

New Holland Revolving Screens are made with a heavy roll cold steel shaft running the full length of the screen. Spiders and rims are keyed to this shaft and truss rods through the spiders making a perfectly rigid frame to which the sections are bolted. This construction makes it easy to remove or replace any section by removing a few bolts. For sand we have special baffle plates on the inside which gives a much larger screening capacity and keeps the meshes cleaner.

For separating the dust from the stone or sand a very fine mesh screen of light wire properly spaced from the main screen is used over the first and sometimes second section of the screen.



No. 24B BACK GEARED REVOLVING SCREEN
With Gear Case Open, Showing Bevel Pinion and Gear

Tabulation of *New Holland* Revolving Screens

No. of Geared Revolving Screen.....	24B	24C	24D	30B	30C	30D	40B	40C	40D
No. of Direct Drive Revolving Screen.....	24BD	24CD	24DD	30BD	30CD	30DD	40BD	40CD	40DD
Diameter of Screens.....	24"	24"	24"	30"	30"	30"	40"	40"	40"
Number of Sections.....	2	3	4	2	3	4	2	3	4
Length of Each Section.....	3'	3'	3'	4'	4'	4'	4'	4'	4'
Speed R.P.M.	25	25	25	25	25	25	25	25	25
Pitch of screen per section 6" to 8"									
Length of screen frame over all.....	11'8"	14'2"	18'	13'8"	16'2"	20'	13'8"	16'2"	20'
Width of screen frame over all.....	36"	36"	36"	42"	42"	42"	52"	52"	52"
Capacity tons per hour.....		8 to 15			10 to 25		25 to 40		
Wt. less cloth or perforated sheets.....	.630	.950	1.150	1.425	1.675	1.925	1.625	1.875	2.125

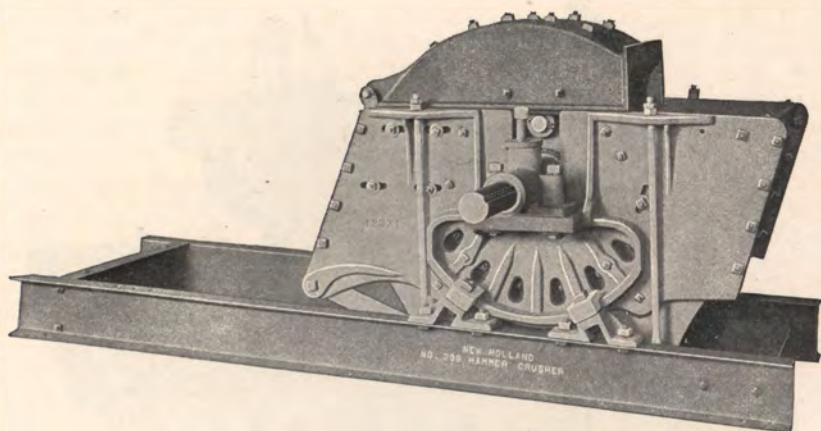
Steel wire cloth carried in stock $\frac{1}{8}$ "- $\frac{1}{4}$ "- $\frac{5}{16}$ "- $\frac{3}{8}$ "- $\frac{1}{2}$ "- $\frac{5}{8}$ "- $\frac{3}{4}$ "-1"-1 $\frac{1}{4}$ "-1 $\frac{1}{2}$ ".

Tabulation of Jolt Screens

No. Screen	Size Cloth	Cam Shaft	Capacity tons per hr.	R.P.M.	Weight lbs.
10	10 x 48"	1"	1 to 2	100	100
31	18 x 48"	1 $\frac{1}{4}$ "	1 to 4	100	250
41	24 x 72"	2"	2 to 6	75	500
51 x 30	30 x 72"	2"	4 to 10	75	800
51 x 36	36 x 72"	2"	4 to 12	75	900

Tabulation on Chute Screens

No. 0	—	4 ft.	—	for No. 0 Elevator.
No. 1	—	4 ft.	—	for No. 30 Elevator.
No. 2	—	4 ft.	—	for Nos. 30, 40 and 50 Elevators.



No. 23B *New Holland* HAMMER CRUSHER

The *New Holland* Hammer Crusher, as supplementary to our jaw and roll crushers, makes our line complete.

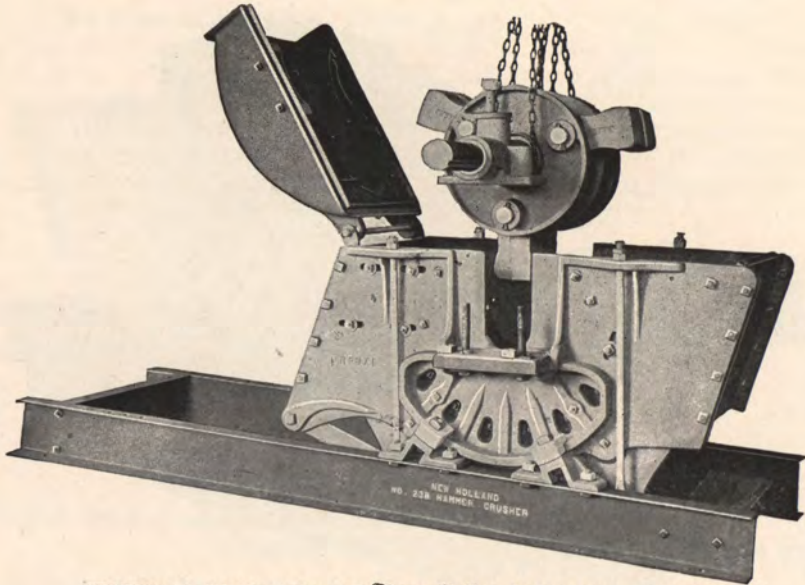
As a primary crusher for large clinkers, soft sand rock not easily handled by a jaw crusher, first reduction of "Red Dog" and shale, it fills a very important place in our line of crushers. Equipped with heavy hammers made from roll metal chilled, and concaves of the same material, and a large mouth, this machine has an enormous capacity as a primary crusher.

The concaves are adjustable, easily removed, and can be raised and lowered to accommodate the wear of the hammers.

For clinkers the end screen bars are removed, permitting iron and other hard substances to pass through without injuring the machine.

The hammer machine is not intended to replace the jaw and roll types, but to be supplementary to them.

For soft sand rock, the hammer crusher can be mounted directly over a No. 10A16 roll crusher, mounted on the same frame, and operated as one unit.



SECTIONAL VIEW of No. 23B *New Holland* HAMMER CRUSHER

The Hammer Crusher is especially valuable to cinder block plants as a primary crusher, where they have large clinkers and iron. The large pieces of iron pass through the hammer machine without injury, and are reclaimed as junk. Running at a comparatively low speed, and equipped with inexpensive hammers and concaves, the upkeep is not excessive even on gritty material.

The Hammer Crusher can be driven from either side and is fitted with large pulley to belt to power and small pulley to drive an elevator.

Tabulation

Size of opening or mouth.....	12" x 18"
Length of sills.....	6 ft. 6"
Width between sills.....	20½"
Width over all.....	53"
Size of pulley.....	14 x 6 x 2½"
R.P.M. of pulley.....	400 to 1000
H. P. required.....	5 to 15
Size of hammers.....	4" x 4"
Weight on skids.....	2,175 lbs.

The *New Holland* Line

New Holland JAW CRUSHERS

New Holland HAMMER CRUSHERS

New Holland ROLL CRUSHERS

New Holland LIME PULVERIZERS

New Holland ELEVATORS

New Holland BELT CONVEYORS

New Holland CHUTE SCREENS

New Holland JOLT SCREENS

New Holland REVOLVING SCREENS

New Holland GASOLINE ENGINES

New Holland WOOD SAWS

New Holland FEED MILLS

New Holland SERVICE

WRITE FOR SPECIAL BULLETIN

Manufactured by

NEW HOLLAND MACHINE COMPANY

New Holland, Pa., U. S. A.