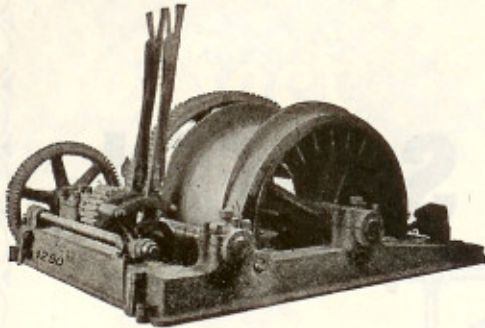


DEWCO ELECTRIC HOISTS



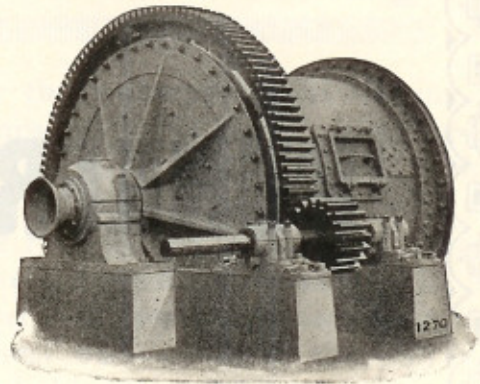
5000-lb. S. D. DEWCO Electric Hoist
Low Frame Type

Single and Double Drum
For all capacities up to 50,000 lb.
Suitable for Any Service

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**FOR
THE**

DEWCO BALL MILLS

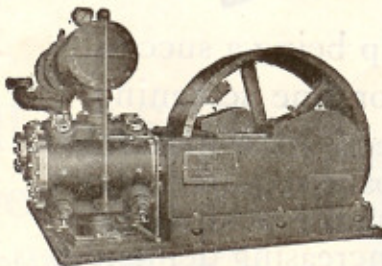


DEWCO Ball Mill

Will crush wet or dry—Take feed direct
from crusher, rolls or stamps—5-ton
capacity to 500-ton capacity in one unit

MINE AND MILL

BURY AIR COMPRESSORS



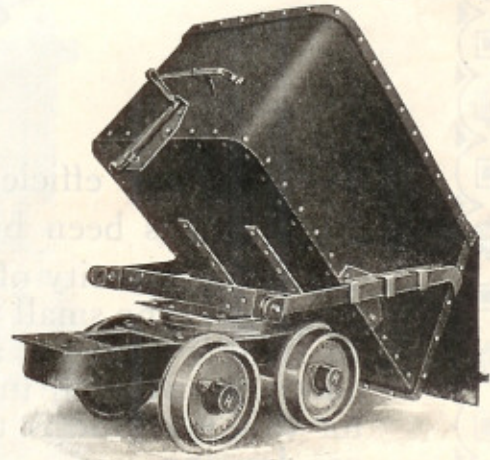
Bury Class BPP Compressor

All Types All Sizes
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SUPPLIES
OF ALL KINDS

MATTESON ORE CARS



Made in Seven Sizes
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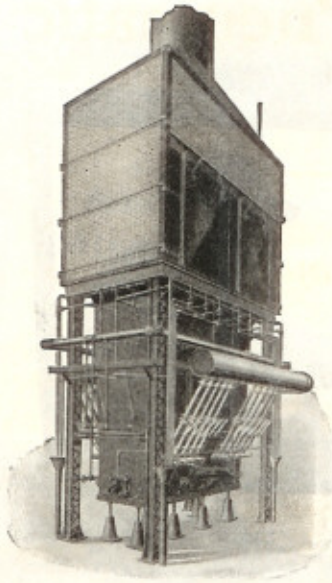
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SAN FRANCISCO
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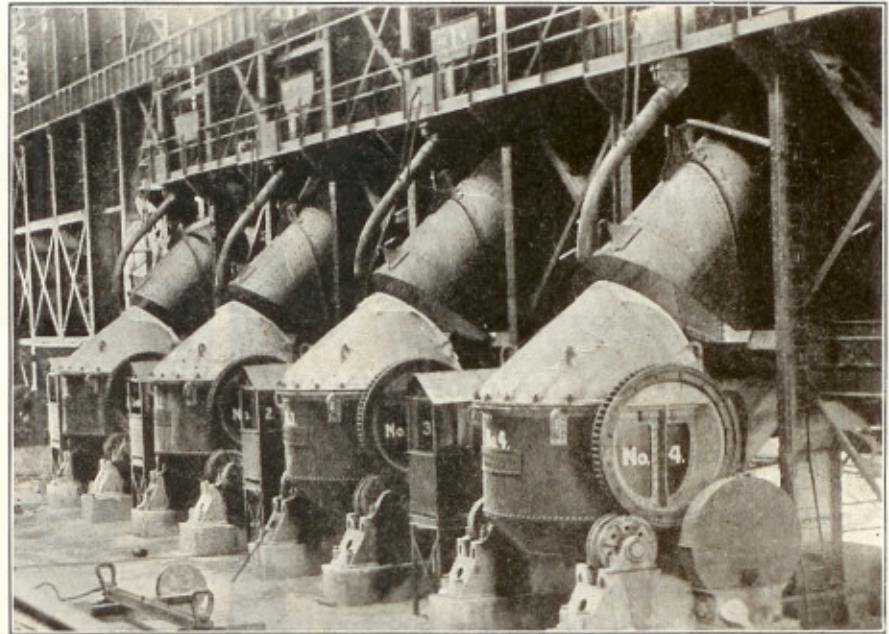
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SMELTING MACHINERY

Furnaces for Copper and Lead Ores

Accessory Equipment — including
Forehearths, Matte Settlers,
Slag Pots, Slag Cars, Dump Cars,
Bullion Moulds, Etc., Etc.

Copper Converters of Modern Design



Constructed for United Verde Copper Co., Clarkdale, Ariz.

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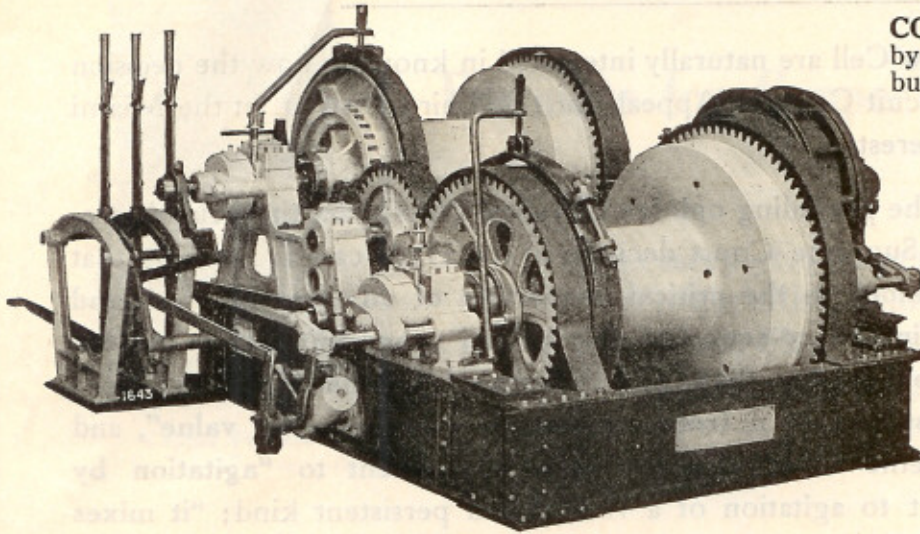
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For all Canadian Business refer to Canadian Allis-Chalmers, Ltd., Toronto, Ont., Canada

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STEAM OR ELECTRIC

For Operating Slack Cable Drag Line Excavators



COMBINE POWER demanded by digging duty, insuring a full bucket every trip.

SPEED for conveying, giving the maximum number of loads.

STRENGTH in every part to withstand the severe strain of scraper bucket work.

Hoists for operating derricks, grab buckets, inclines, shafts and every type of contractors' work.

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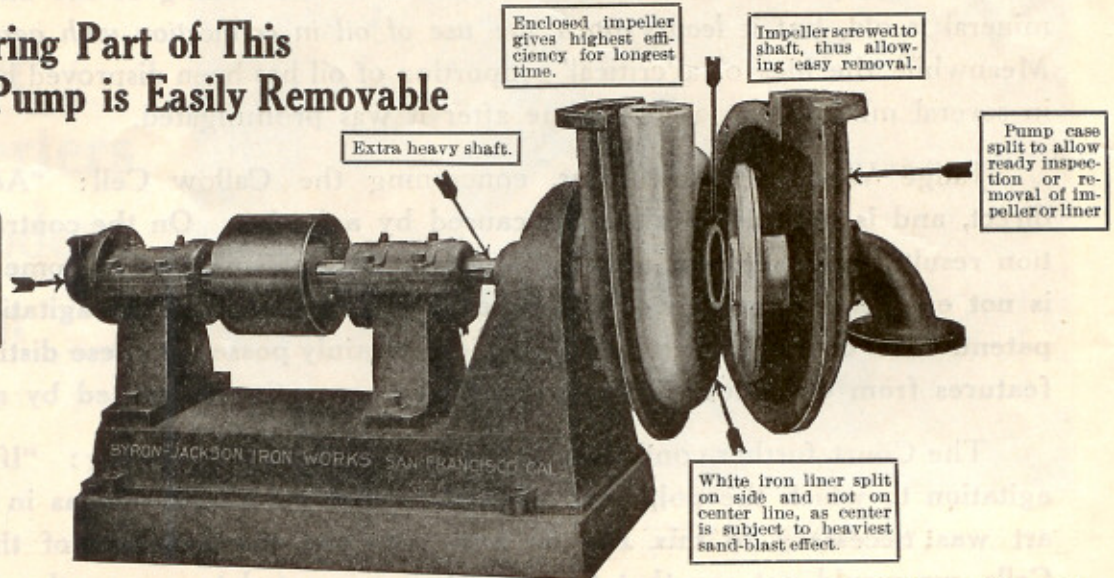
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Every Wearing Part of This Tailing Pump is Easily Removable

Mechanical thrust bearing which eliminates balance ports. Balance ports permit circulation causing undue wear on runner.



The success of our new type tailing pump has been instantaneous, because it was designed for mining work in conjunction with mining engineers of practical experience. Among others, we have supplied and have on hand orders for this type of pump from

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all of whose engineers are recognized in their respective countries as being leaders in their profession.

Catalogue 25A is yours for the asking.

BYRON JACKSON IRON WORKS

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Operators of Mines, Mills and Smelters

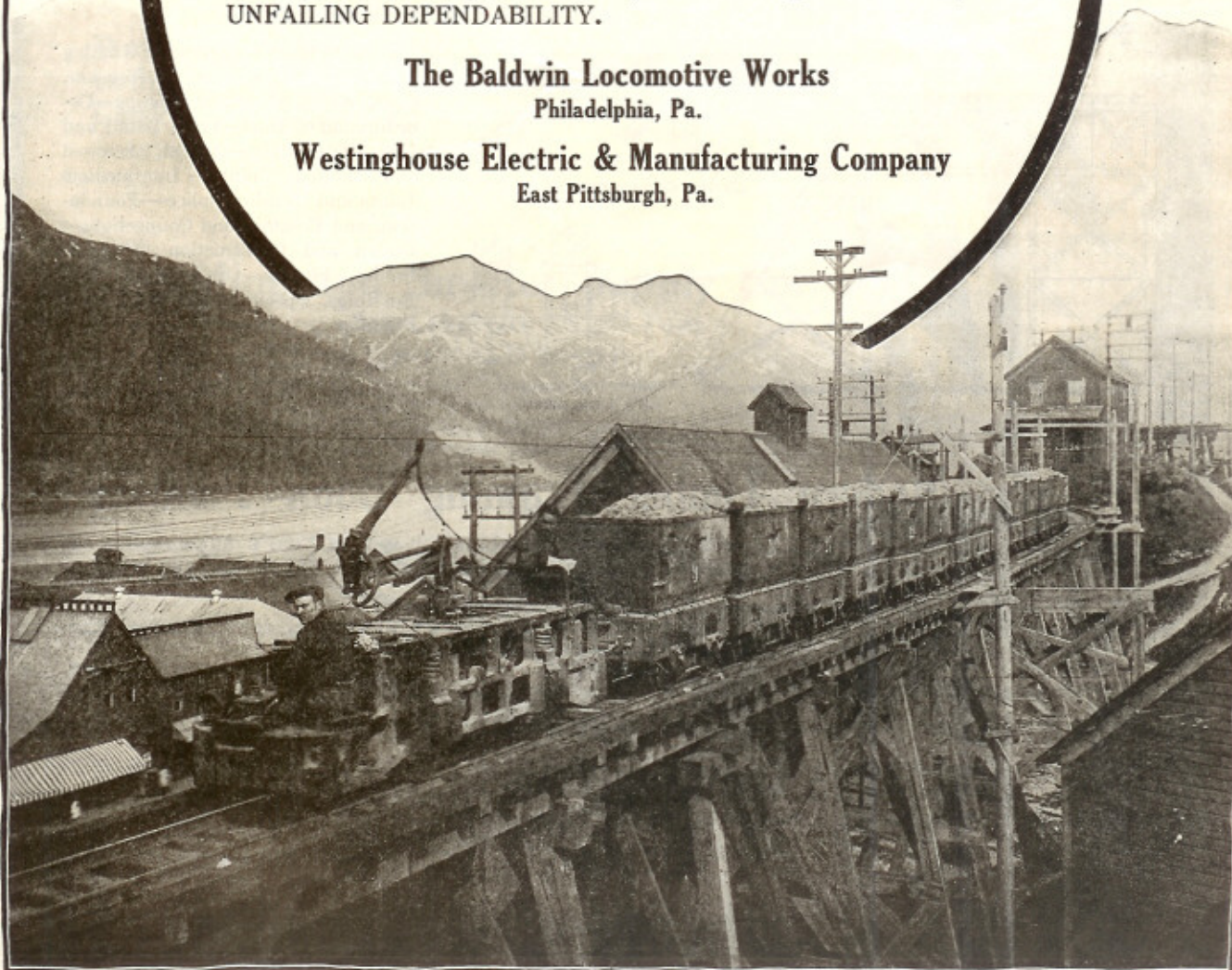
The Baldwin-Westinghouse Electric BARSTEEL Locomotives in many sizes for all purposes.

Few haulage problems are just alike. Each needs individual analyzing. Here's where Baldwin-Westinghouse are exceptionally well equipped to serve you. This combination not only includes a great number of experts in the design and application of locomotives, but each is the leader in his respective field.

This, together with the quality of product that bears the Baldwin-Westinghouse name plate assures you of the highest efficiency and UNFAILING DEPENDABILITY.

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IN purchasing electrical equipment and supplies for practically any requirement of mine, mill, or smelter, you will do well to specify MASSCO Products.

All MASSCO goods are of standard design and make and are, in most instances, carried in one of our three warehouses ready for immediate shipment.

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Large Stocks Carried in Denver, Salt Lake City and El Paso

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Symons Disc Crushers

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Now in successful operation in most of the large mining plants, such as:

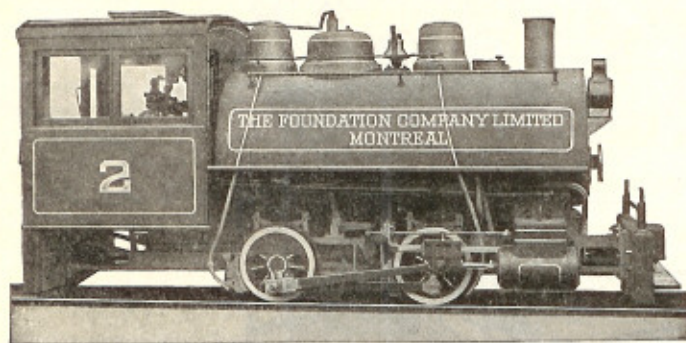
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MINING LOCOMOTIVES



Length of service, proportion of time ready for use, and work performed determine the value of a locomotive.

With these points in mind we have designed and built our small locomotives to insure reliability and constant service. Only tested materials are used, and all wearing parts are made to templates and gauges. With

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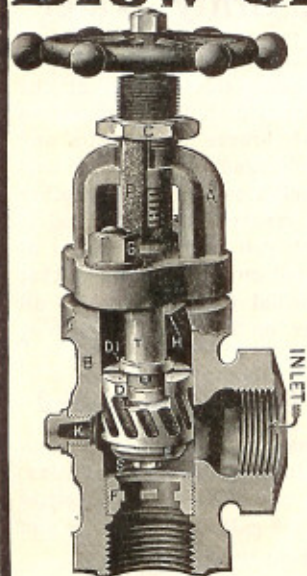
A. Baldwin & Company, New Orleans, La.

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N. B. Livermore & Company, San Francisco and Los Angeles, California.

Northwestern Equipment Company, Seattle, Wash., and Portland, Oregon.

CYCLONE Blow-off Valve



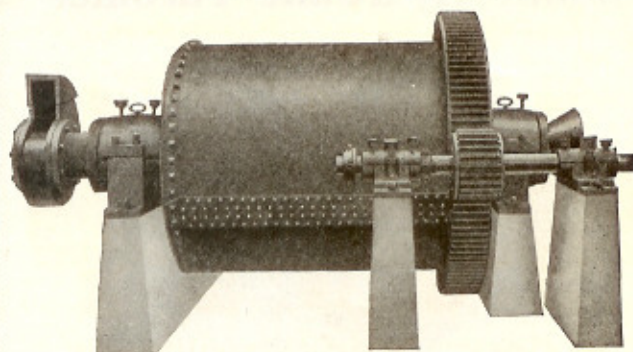
Five Points of Efficiency
Combined in the Powell
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Valves

- ★ 1. Body and yoke cast of a select grade iron of high tensile strength.
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- ★ 5. The Powell "Cyclone" has more good points than any other Blow-Off Valve on the market today.

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THE Wm. POWELL CO.
DEPENDABLE ENGINEERING SPECIALTIES.
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A Grinding Machine of Proven Efficiency and Capacity
An Economical Mill to Install and Operate

BALL MILLS, the modern crushing device, take the ore from the crusher to desired size in one operation.

A special feature in THE STANDARD BALL MILL is the self-locking corrugated lining, requires no bolts through shell, will wear thinner and longer than those which are bolted in. No special lifting devices required.

Made in all sizes. Following sizes carried in stock for immediate shipment.

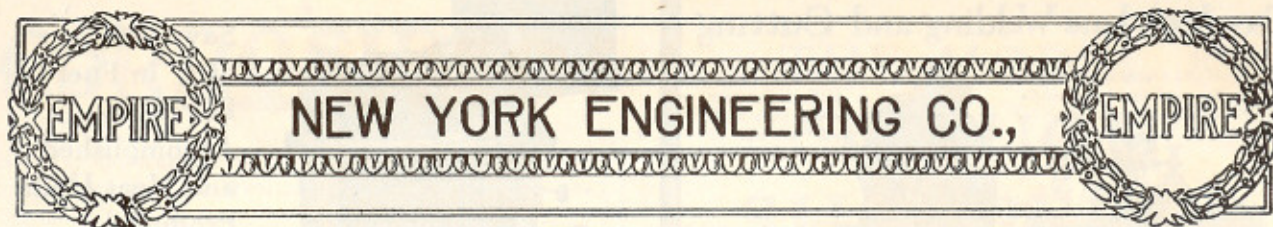
5x4, capacity crusher product to 12 mesh, 10 tons per hour; H.P. required 40.

4x3, capacity crusher product to 12 mesh, 3 tons per hour; H.P. required 15.

Laboratory or Sample Mill, either ball or pebble mill, 250 lbs. per charge.

We also carry in stock for immediate shipment Manganese Steel Balls in sizes 1" to 4" and High Carbon Steel Forged Balls.

The Morse Bros. Machinery & Supply Co.
Denver, Colorado

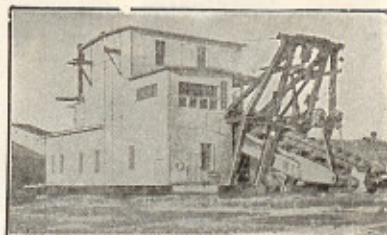


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That is, we design and build placer mining machinery, specializing in

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Gold Dredges
Prospecting Drills
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and all and any Placer Equipment



Empire Gold Dredge Operating in Siberia

Empire catalogs on gold dredges and prospecting drills give interesting details of what we have done for others, and what we can do for you.

Empire Placer Mining Apparatus is Successfully Used in All Parts of the World.

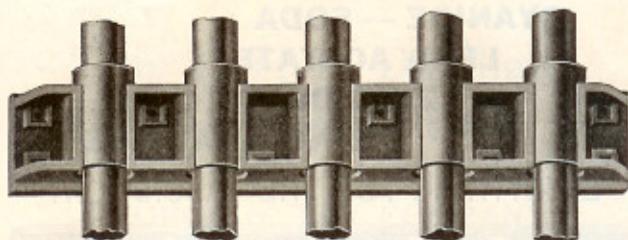
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2-RECTOR STREET, - NEW YORK

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Self-Tightening Replaceable Shells (in Halves)
One Piece Shell Holder Frame



IN STOCK — IMMEDIATE SHIPMENT

SPECIFICATIONS:	Stem Diam.	Stem Centres	Wt. Ea.	Code Word
Frames.....	3 1/8" to 3 3/8"	9 1/4"	300 lb.	Fetto
"	3 1/8" to 3 3/8"	10"	320 lb.	Fargo
"	3 3/8" to 4"	9 1/2"	380 lb.	Feint
"	3 3/8" to 4"	10"	400 lb.	Flamb
Shells	3 7/16"		20 lb.	Sneed
"	3 1/2"		20 lb.	Sapho
"	3 7/8"		35 lb.	Smeat
"	4"		32 lb.	Shova

Frames and shells are cast iron, machine fitted.
Two frames and ten shells equip five stamps.

FRAMES AND SHELLS OF OTHER SPECIFICATIONS
ON SHORT NOTICE

ANGELS IRON WORKS

ANGELS CAMP MINING MACHINERY CALIFORNIA

B & B AERIAL TRAMWAYS

The Shortest Distance Between Two Points



**Ore from Mine
to Mill with-
out interrup-
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is assured to
users of

**B & B
AERIAL
TRAMWAYS**

The two-bucket system for small and medium capacities is simplicity itself. It is operated by one man and reduces haulage costs to but a few cents per ton.

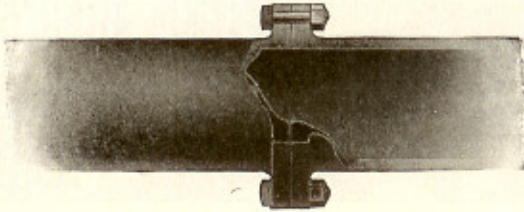
Whatever your present method of mine transportation, write us. It will pay you.

BRODERICK & BASCOM ROPE CO.
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MADE IN CALIFORNIA

has many applications to mining and metallurgical conditions where acid or alkaline solutions have to be employed.



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A steel pipe fits over a CORROSIRON liner and is peined against the flanges of the CORROSIRON to hold it in place. The space between is filled with non-corrosive material such as plaster of paris or any type of acid cement.

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Immediate Delivery

Special Bargain Price

One 25 H. P. Distillate Horizontal Engine.

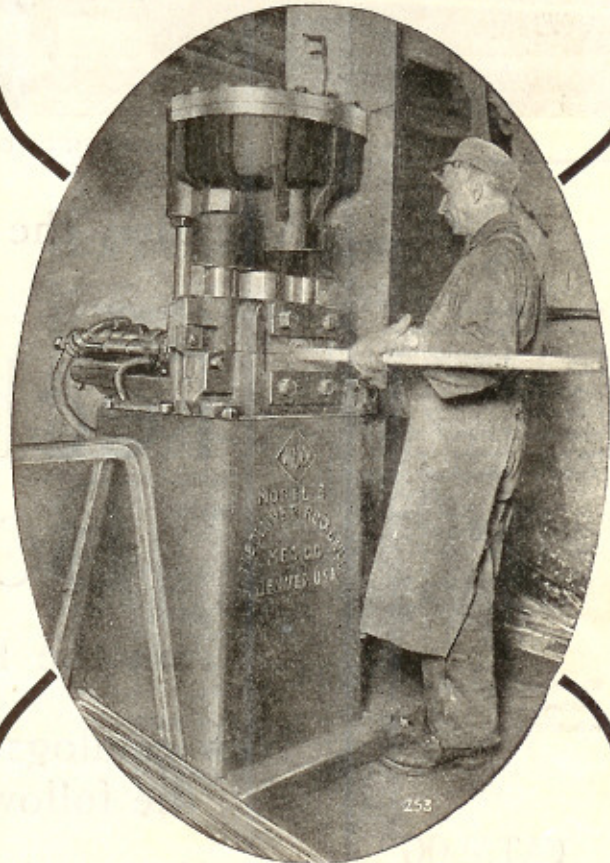
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Reduces the Cost of Drilling



In the Britannia Mine, Britannia Beach, B. C.

The highest efficiency in sharpening and shanking steel is only obtainable with the Model 8 Waugh Sharpener. It produces perfectly gauged bits and shanks in the *shortest possible time* with the *minimum consumption of air*.

In addition to using less air at equal pressures than other machines, it will operate effectively on lower pressures than are required by machines of similar capacity.

This Sharpener not only saves in labor costs by greatly increasing the production of the blacksmith, but his ability to keep the Drill runner supplied with the proper steel increases the drilling speed and reduces the labor cost of drilling.

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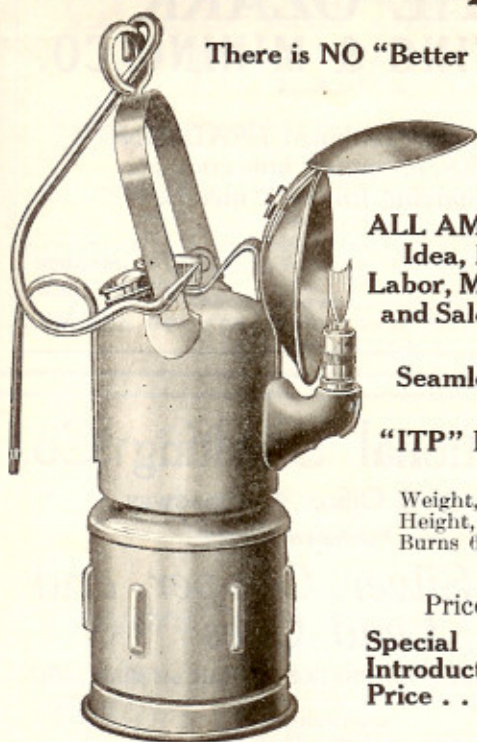
Send for complete descriptive catalogue of tramways in use.

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The BIG JIM Special

There is NO "Better Lamp."



ALL AMERICAN—
Idea, Material,
Labor, Manufacture
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Seamless Steel.

"ITP" New-Feed.

Weight, 24 oz.
Height, 7 in.
Burns 6½ to 9 hrs.

Price \$4.00.

Special
Introductory
Price **3.50**

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In sheer cliffs and waterfalls
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In scenic grandeur it is unsur-
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Remarkably low fares.

Write for Illustrated Yosemite
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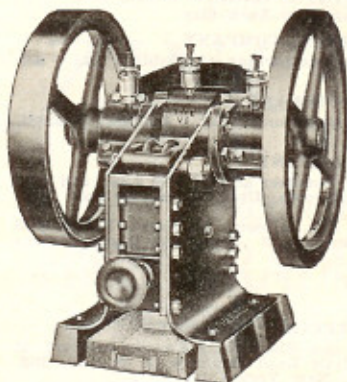
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in two sizes

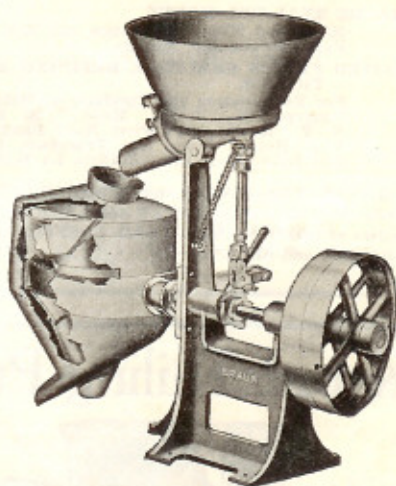
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Built of Steel.

Great capacity
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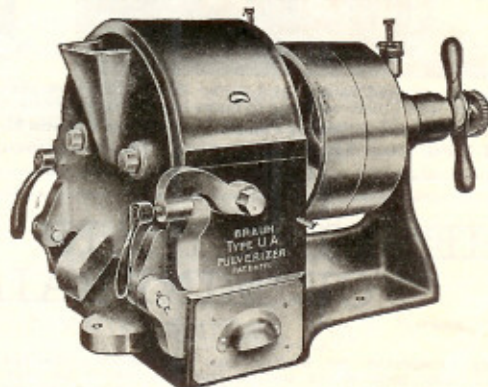
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Grinding plates of *special alloy for strength,
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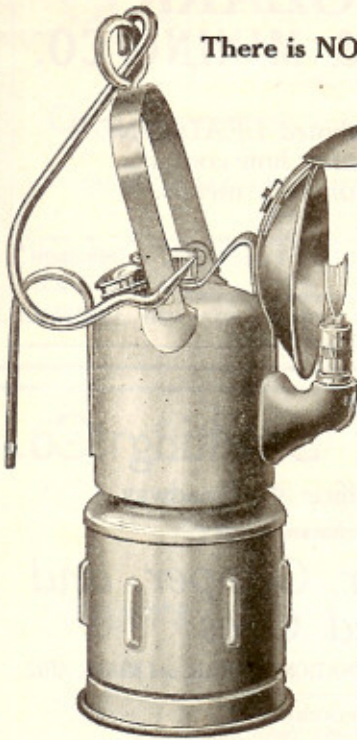
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Manufacturers of Laboratory Labor Saving Machinery
Specialists in Laboratory Equipment and Testing Apparatus
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Seamless Steel.

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Weight, 24 oz.
Height, 7 in.
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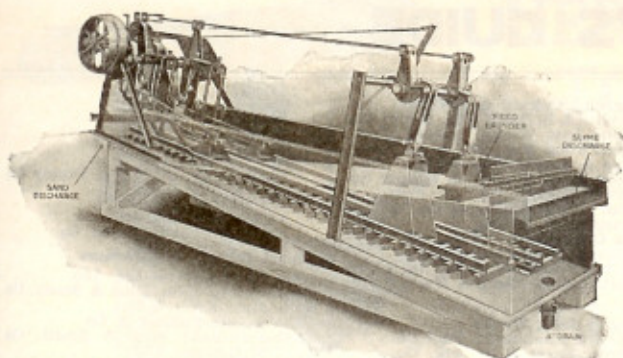
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The Dorr Classifier (Patented)

Do You Want 48 Mesh Separation?

If so, don't experiment—we have already proven that Dorr Classifiers will in fact give you a clean separation at any point between 28 and 200 mesh.

Such companies as the Inspiration Consolidated, Miami Copper, Chino Copper, Ray Consolidated, and Old Dominion Copper are all using **Dorr Classifiers** for 48 mesh separation.

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Economy in Mine Station Pumping

The severe duty of mine station service requires a pump of compact design, capable of handling gritty or acid-bearing water, so designed that it will withstand the shock of back pressure and combining high efficiency with reliability in any condition of service.

"American" Centrifugal Pumps

fulfill these conditions, because they have been developed after many years of experience in building all kinds of pumps, to meet all these requirements. When so ordered, they are made of acid-resisting material, and equipped with air chamber, check valve, with bypass, and with the check valve having a relief valve set to open at any predetermined pressure.

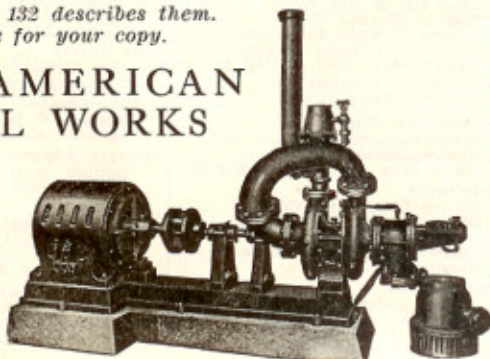
They are made in styles and multiple stages to meet any requirement of location or condition of head.

Catalogue 132 describes them.
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Rock Drill and Mining Steel

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Has no superior, and is used with all drills wherever the BEST is needed.

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