FORGES
BLOWERS
DRILLS
PUNCHES
SHEARS
SHRINKERS
GRINDERS

CATALOG NO. 12

CANEDY-OTTO
MANUFACTURING CO.
CHICAGO HEIGHTS, ILL.

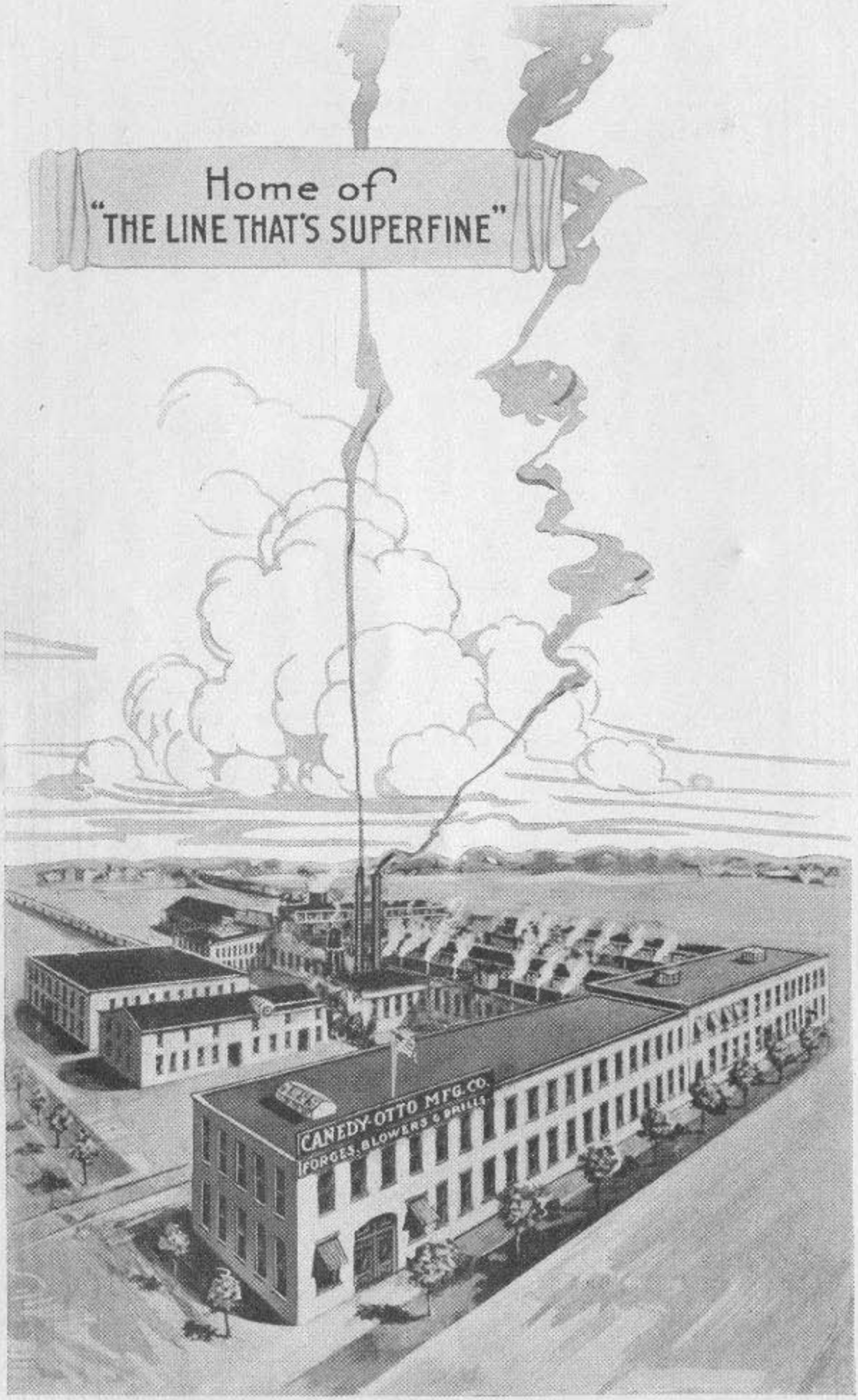
INDEX

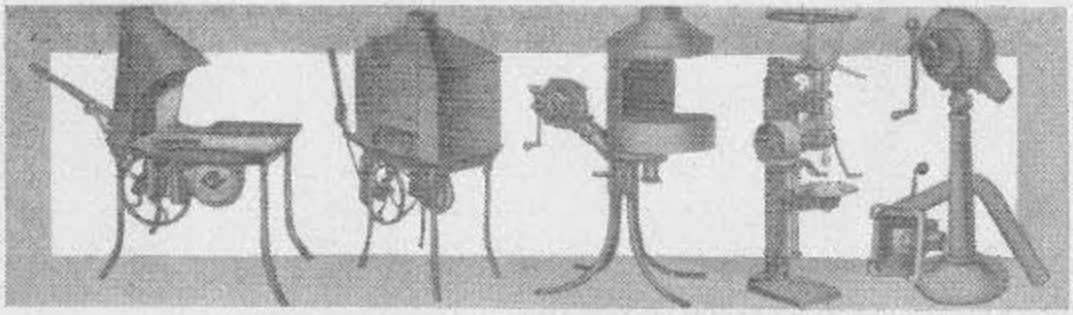
FORGES
BLOWERS
PUNCHES
SHEARS
GRINDERS
DRILLS & TIRE SHRINKERS

ILLUSTRATING
AND
DESCRIBING
"THE LINE
THAT'S SUPERFINE"

MANUFACTURED BY

CANEDY-OTTO
MANUFACTURING
COMPANY
CHICAGO HEIGHTS, ILL.


Home of
"THE LINE THAT'S SUPERFINE"
CANEDY-OTTO MFG. CO.
FORGES, BLOWERS & DRILLS



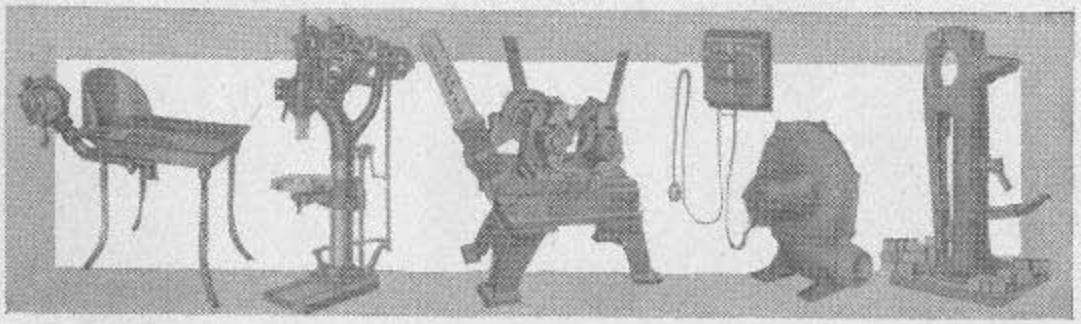
FOREWORD

THERE is no line of machinery in the world that more thoroughly and more honestly answers all the requirements of blacksmiths, foundries, repair shops, machine shops, boiler shops, garage shops, etc., etc., as the old reliable Canedy-Otto line. From a tiny business, making only a small variety of machinery, we have developed into one of the foremost manufacturing institutions in the country. Why? Because we have made good—because we have pleased—because we have given value.

Therefore, it is with the greatest pride that we present the following pages for your consideration. Look the line over carefully and critically and your judgment will undoubtedly concede that preference is worthily placed when bestowed in connection with

"The Line That's Superfine"

CANEDY-OTTO MFG. CO.



Chicago Heights
I l l i n o i s

Ball-Bearing and Safety Chuck

As Furnished on Western Chief Drills

Nos. 1, 2, 3, 7, 12, 14, 15, 16, 17, 18, 19 and 20.

← Ball-Bearing

A single Steel Ball resting on a hardened Steel Disc. This contact of Ball and Disc forms a bearing in which the friction is too little to estimate.

These two features entirely overcome the old friction bearing, which was so objectionable.

← Safety Chuck

It is opened and closed with the hand.

No more set-screws to mar and bruise the shanks of bits.

No more wrenches to tighten and loosen set-screws.

No more twisting of bits in the chuck.

No more trouble in inserting and removing bits from chuck.

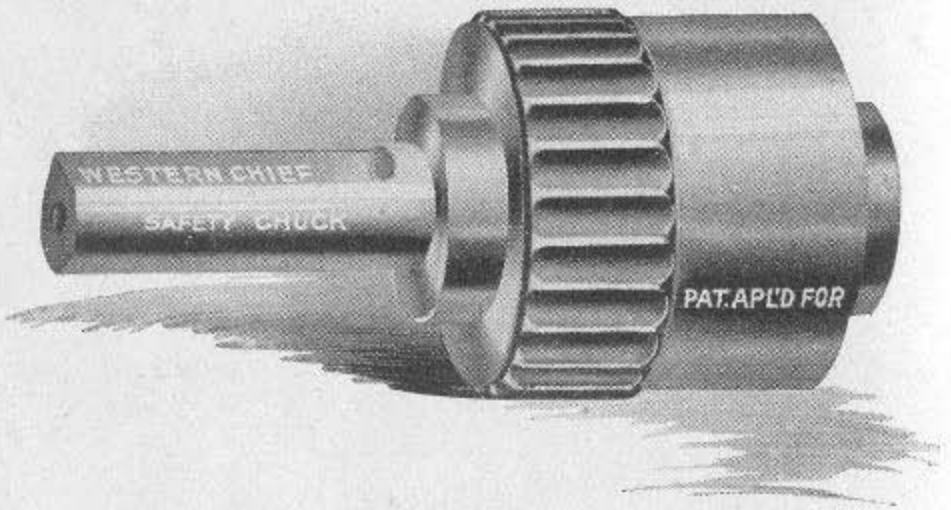
Chicago Heights
Illinois

Western Chief Safety Drill Chucks Nos. 1, 2, 3 and 4

The Western Chief Safety Chuck is so made as to eliminate the use of set-screws, keys or wrench. Drill bits can be inserted or removed in an instant, and when bit is in chuck it can never slip.

No Wrenches. Opened and closed with the hand.

No set-screws.



Cut One-half Size

When Drill Spindles are bored ½-inch, and bits on hand are $\frac{41}{64}$-inch shank—or spindle is bored $\frac{41}{64}$-inch and bits on hand have ½-inch shank, or you have bits on hand with both size shanks—these Chucks provide a way out of the trouble. See Chucks 1 and 2.

Western Chief Drills, Nos. 1, 2, 3, 7, 12, 14, 15, 16, 17, 18, 19 and 20, have Spindles equipped with our Safety Chuck without extra charge. See page 95.

Owners of Drills with old-style Chuck with set-screw can be supplied with W. C. Safety Chuck to fit hole in mandrel on their drill. See Chucks 3 and 4.

Chuck No. 1, Arbor ½-inch, Hole $\frac{41}{64}$-inch	$3.00
Chuck No. 2, Arbor $\frac{41}{64}$-inch, Hole ½-inch	3.00
Chuck No. 3, Arbor ½-inch, Hole ½-inch	3.00
Chuck No. 4, Arbor $\frac{41}{64}$-inch, Hole $\frac{41}{64}$-inch	3.00

Western Chief
DRILLS

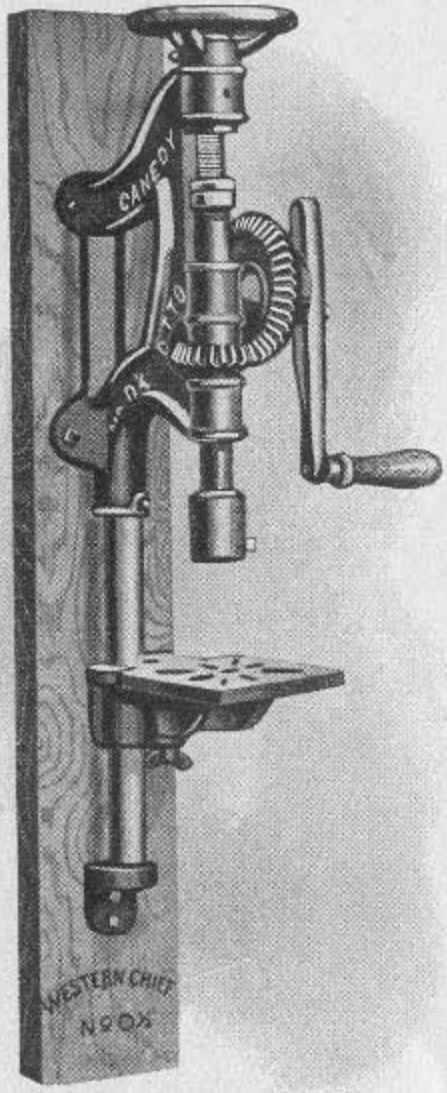
THE most complete line of Drills (quality, desirability and general value considered) on the market. Every test makes a new friend—for some thoroughly satisfactory drill experience we recommend a trial of any machine listed on the following pages.

Pages 97 to 132 Inclusive

Chicago Heights
I l l i n o i s

Western Chief Drill
No. 0½

A Single-Geared, Hand-Feed Drill



Our No. 0½ Drill is a Neat, Durable Article, but is Hand-feed Only

Bores 0 to ¾ inch.

Drills to center of 12-inch Circle.

Up and Down run of Spindle, 2¾ inches.

Up and Down run of Table 9½ inches.

Greatest distance from Table to Spindle, 9½ inches.

Takes bits with ½-inch Shanks.

Weight, 50 pounds.

Light Wheel Rims can be drilled by removing table and using forked support as a wheel-holder

Best materials in its construction.

For List of Repairs See Page 166

List Price $5.50

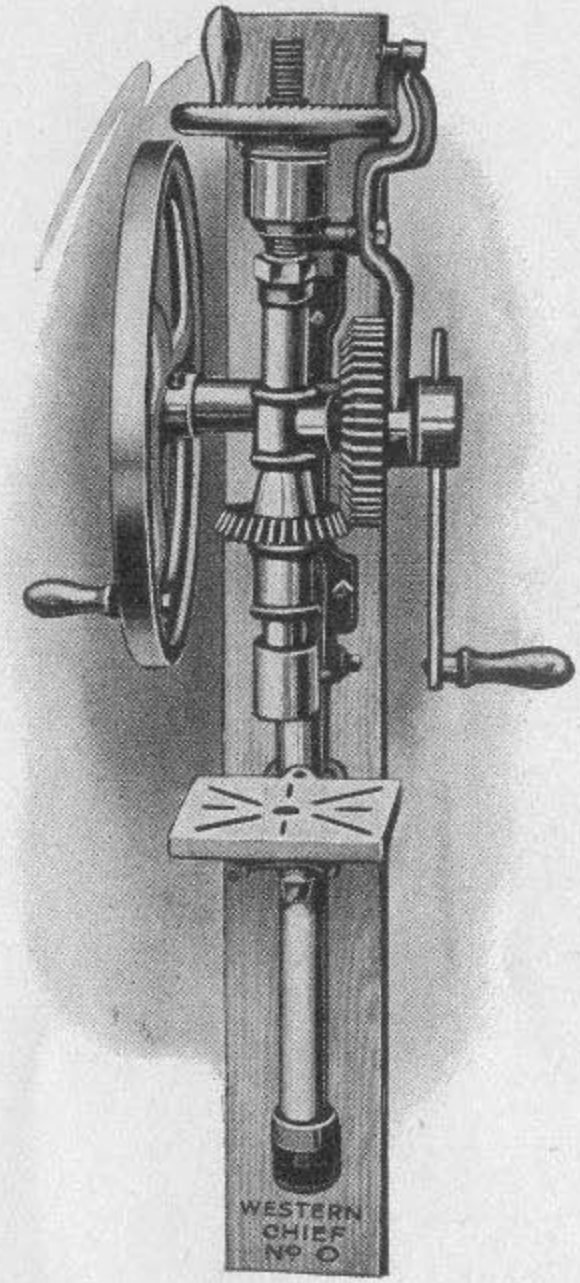
Western Chief Drill

Chicago Heights
Illinois

No. 0

Neat, Light and Durable

Our No. 0 Drill is Simple, yet Complete, and for Light Work is Very Satisfactory



Self-feed, Changeable Speed.

Fast and Slow Speed.

Bores 0 to ¾ inch.

Drills to center of
12 inch circle.

Up and Down run of
Spindle, 2¾ inches.

Up and Down run of Table,
9½ inches.

Greatest distance from Table to
Spindle, 9½ inches.

Takes bits with
½ inch shanks.

Weight, 75 pounds.

Light Wheel Rims can be drilled by removing table and using forked support as a wheel-holder

The best material is used in its construction

Steel Mandrel, Shafts and Feed Screw

For List of Repairs See Page 166

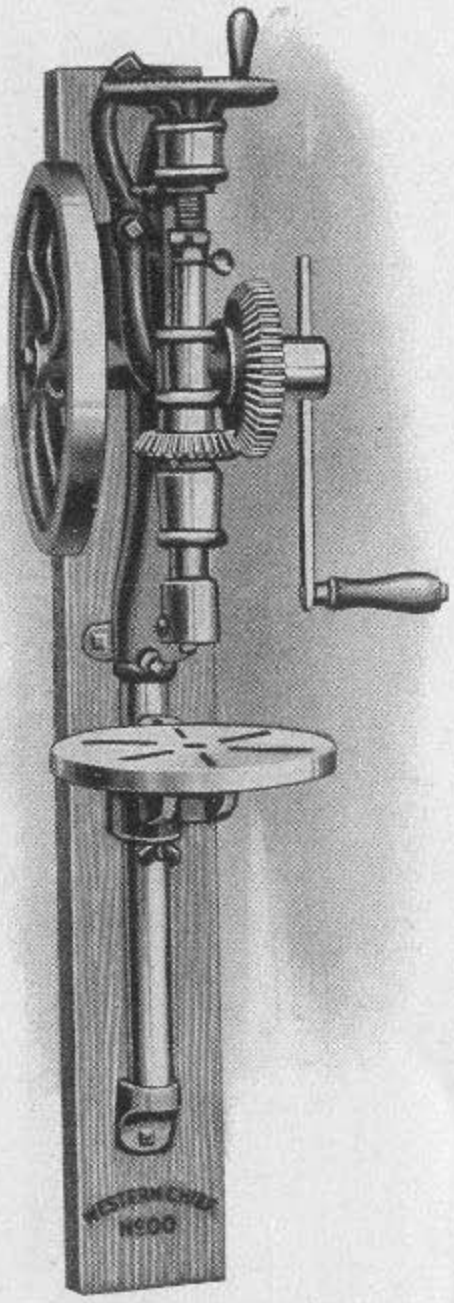
List Price $7.50

MFG. COMPANY

Chicago Heights
I l l i n o i s

Western Chief Drill
No. 00

A Reliable Drill at the Lowest Cost



Two speeds,
Fast and Slow.

Self-feed,
Changeable Speed.

Drills to center
of 15-inch circle.

Bores from
0 to 1¼ inches.

Up and Down run of
Spindle, 3 inches.

Up and Down run of
Table, 10¾ inches.

Greatest distance from
Spindle to Table, 13 inches.

Size of Pulleys for Power,
8x2⅛ inches.

Should run 200
revolutions per minute.

Spindle bored for ½
$\frac{41}{64}$ inch shank bits.

Always state size
when ordering.

Weight, 110 pounds.

Light Wheel Rims can be drilled by removing table and using forke
support as a wheel-holder.

Power Attachment, $2.00 net extra

For List of Repairs See Page 168

List Price $10.0

Western Chief Drill
No. 1

Chicago Heights
Illinois

"Quick Return"

Self-feed, with three different speeds to feed:

Slow, Medium and Fast.

Double Geared for Slow or Fast Speed.

Slotted, Rotating, Swinging Table.

Drills to center of 15-inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle, 2¾ inches.

Up and Down run of Table, 13 inches.

Greatest distance from Table to Spindle, 13 inches.

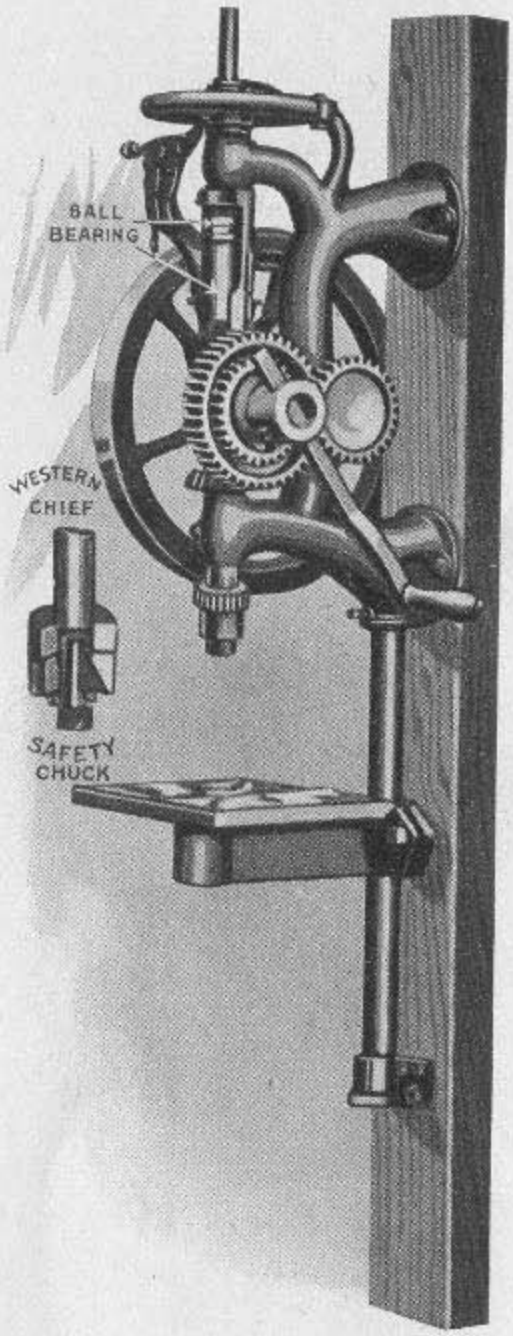
Size of Pulleys for Power, 8x2⅛ inches.

Should run 200 revolutions per minute.

Spindle bored for ½ or $\frac{11}{64}$-inch shank bits.

Always state size when ordering.

Weight, 130 pounds.



Wheel Rims can be drilled by removing table and using forked support as a wheel-holder

Power Attachment, $2.00 net extra

For List of Repairs See Page 170

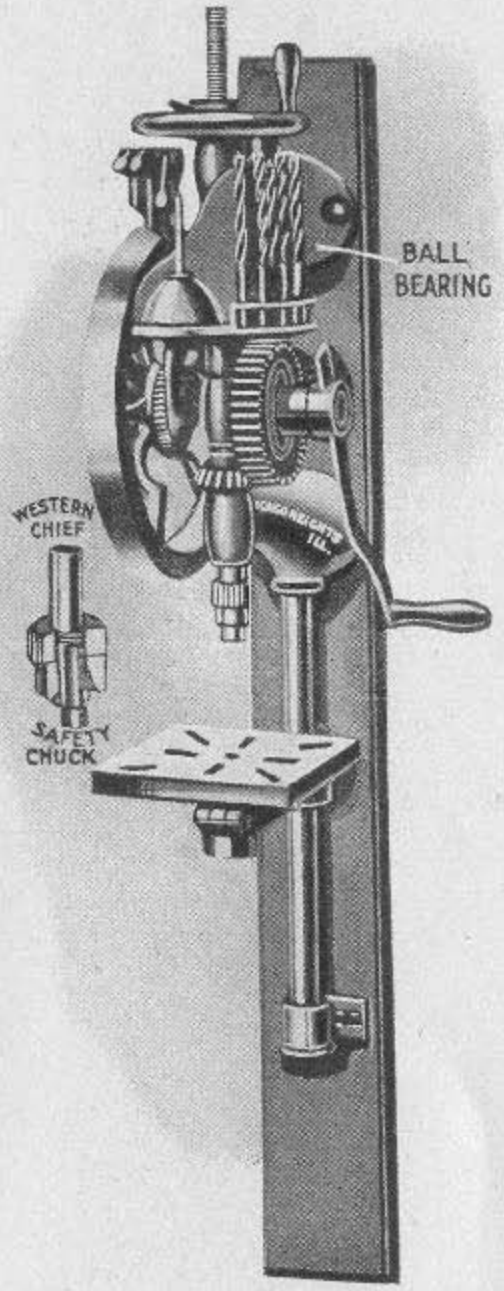
List Price $15.00

MFG. COMPANY

Chicago Heights
Illinois

Western Chief Drill No. 2

A First-class Drill at a Very Reasonable Price



Self-feed, with three different speeds to feed:

Slow, Medium and Fast.

Double Geared for Slow or Fast Speed.

Slotted, Rotating, Swinging Table.

Drills to center of 15 inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle, 3¼ inches.

Up and Down run of Table, 13 inches.

Greatest distance from Table to Spindle, 13 inches.

Size of Pulleys for Power, 8x2⅛ inches.

Should run 200 revolutions per minute.

Spindle bored for ½ or $\frac{41}{64}$-inch shank bits.

Always state size when ordering.

Weight, 125 pounds.

Wheel Rims can be drilled by removing table and using forked support as a wheel-holder

Power Attachment, $2.00 net extra

For List of Repairs See Page 170

List Price $14.50

Western Chief Drill No. 3

Chicago Heights
Illinois

Not a Cheap Babbitted Affair, but a Successful Self-feed Drill, Built on Mechanical Principles

Automatic Self-feed.

Drills to center of 14½ inch circle.

Bores 0 to 1 inch.

Up and Down run of Spindle, 3½ inches.

Up and Down run of Table, 11 inches.

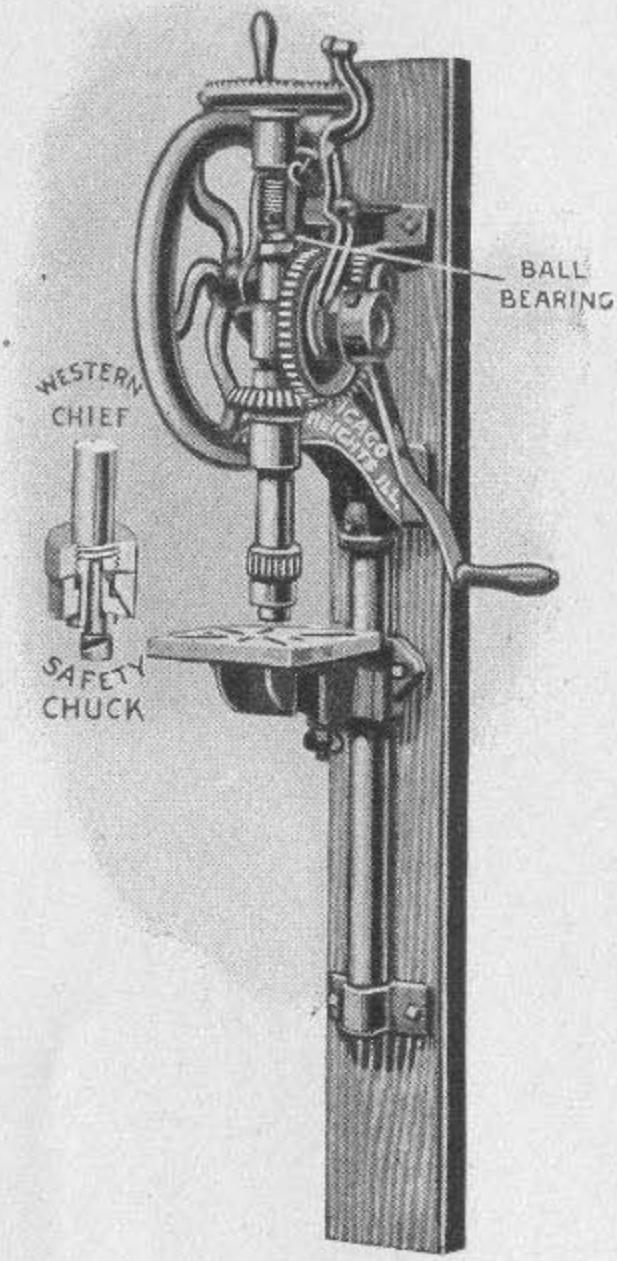
Greatest distance from Table to Spindle, 10½ inches.

Size of Pulleys for Power, 8x2⅛ inches.

Should run 200 revolutions per minute.

Spindle bored for ½ or $\frac{41}{64}$-inch shank bits. Always state size when ordering.

Weight, 95 pounds.



Wheel Rims can be drilled by removing table and using forked support as a wheel-holder

Power Attachment, $2.00 net extra

For List of Repairs See Page 172

List Price $10.00

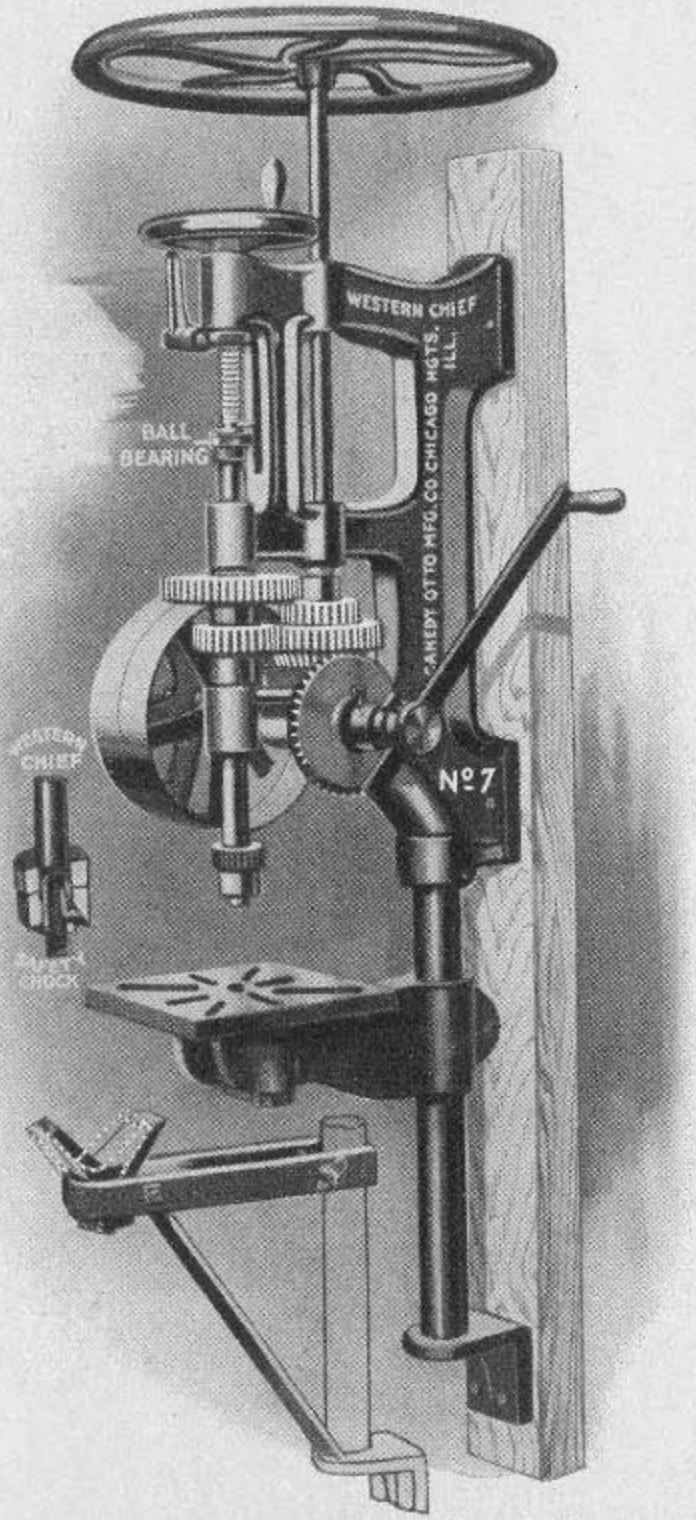
MFG. COMPANY
Chicago Heights
I l l i n o i s

Western Chief Drill No. 7

Cut Gears only used in this Drill

Automatic Self-feed. Fast and slow speed, instant change.

Drills to center of 21-inch circle. Bores 0 to 1½ inches



Up and Down Run of Spindle, 5 inches.

Up and Down Run of Table, 16½ inches.

Greatest distance from Table to Spindle, 19½ inches.

Size of Pulleys for Power, 10¾x2½ inches. Should run 175 to 180 revolutions per minute. Spindle bored for ½ or $\frac{41}{64}$ inch shank bits. Always state size when ordering.

WEIGHT

Hand Power, 275 lbs.
Pulley Power, 295 lbs.

The shaft on this drill (when ordered hand power) is left extended to receive pulleys any time thereafter.

Wheel Rims can be drilled by removing table and using the forked support as a wheel-holder. A special Wheel-holder Attachment, as illustrated, is furnished, when ordered, for $2.00 extra.

Always shipped without pulleys, unless ordered. Wheel-holder Attachment, $2.00 extra.

List Price, without Pulleys, Hand Power only.....$33.50
List Price, with Pulleys (as illustrated)..... 37.50

For List of Repairs See Page 176

Western Chief Drill No. 12

Chicago Heights
Illinois

Cut Gears only used in this Drill

Automatic Self-feed.

Fast and Slow Speed, instant change.

Drills to center of 16 inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle, 4 inches.

Up and Down run of Table, 15½ inches.

Greatest distance from Table to Spindle, 16 inches.

Size of Pulleys for Power, 10¾x2½ inches. Should run 175 to 180 revolutions per minute.

Spindle bored for ½ or $\frac{41}{64}$ inch shank bits. Always state size when ordering.

Weight, Hand Power, 215 pounds.

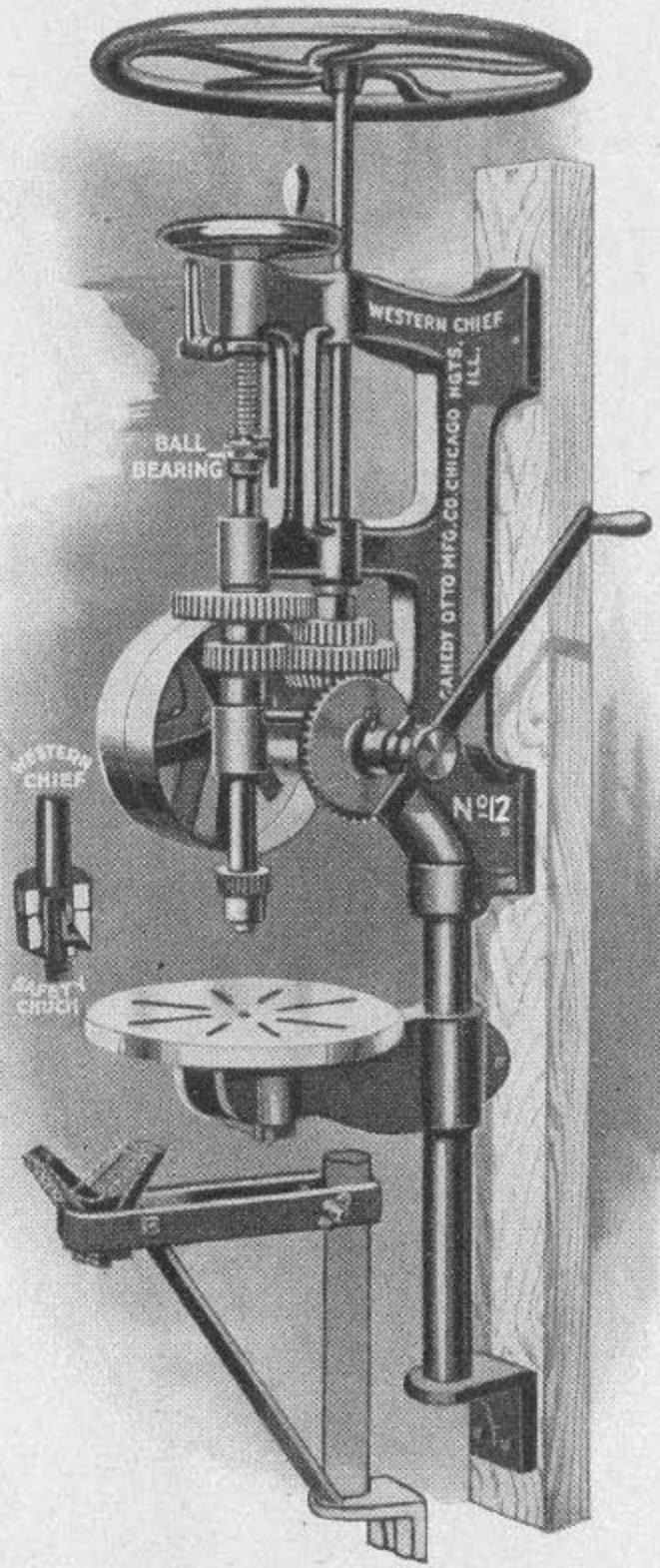
Weight, Pulley Power, 235 pounds.

The shaft on this drill (when ordered hand power) is left extended to receive pulleys any time thereafter.

Wheel Rims can be drilled by removing table and using forked support as a wheel-holder. A special Wheel-holder Attachment, as illustrated, is furnished, when ordered, for $2.00 extra.

Always shipped without pulleys, unless ordered.

Wheel-holder Attachment $2.00 extra.



List Price, without Pulleys, Hand Power only..... $27.50

List Price, with Hand and Pulley Power Attachments (as illustrated) 31.50

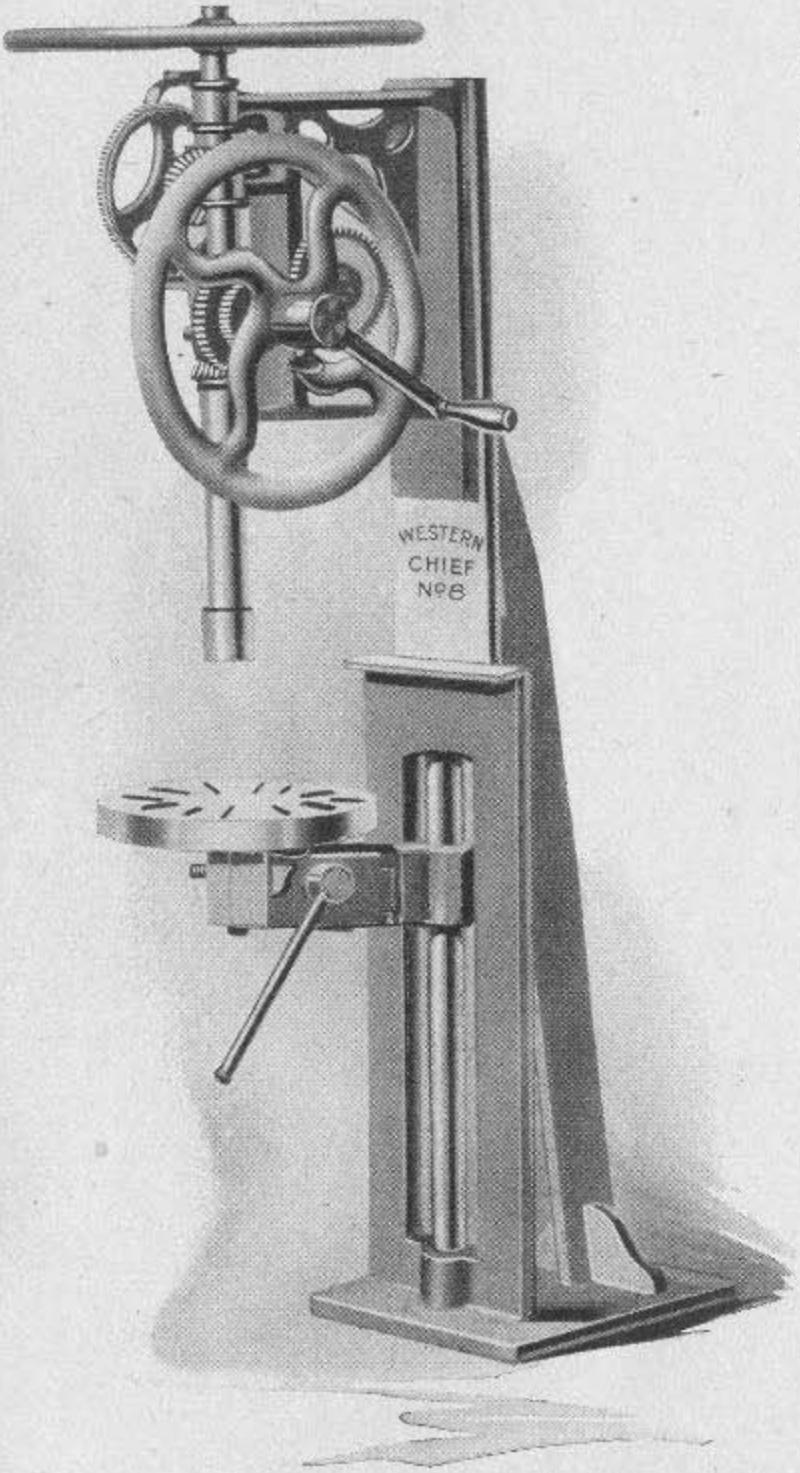
For List of Repairs See Page 176

MFG. COMPANY

Chicago Heights
Illinois

Western Chief Drill
No. 8

A Self-feed Hand Drill, Designed for Use Anywhere upon the Floor. No Post or Wall to Attach it to Necessary



Hand Power only.

Changeable Self-feed.

Drills to center of 23 inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle, 5 inches.

Up and Down run of Table, 20 inches.

Greatest distance from Table to Spindle, 18 inches.

Spindle bored for ½ or $\frac{11}{64}$ inch shank bits.

Always state size when ordering.

Height, 60 inches.

Weight, 380 pounds.

It has a slotted table which, in addition to swinging from side to side, also rotates, enabling the operator to bring his work under the bit at any place desired.

A second speed for heavy work is readily obtained by inserting the crank handle into rim of fly-wheel.

List Price $30.00

Western Chief Drill

Chicago Heights
Illinois

No. 9

Combined Hand and Power Self-feed Floor Drill

Both Hand and Pulley Power.

Changeable Self-feed.

Drills to center of 23 inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle, 5 inches.

Up and Down run of Table, 20 inches.

Greatest distance from Table to Spindle, 18 inches.

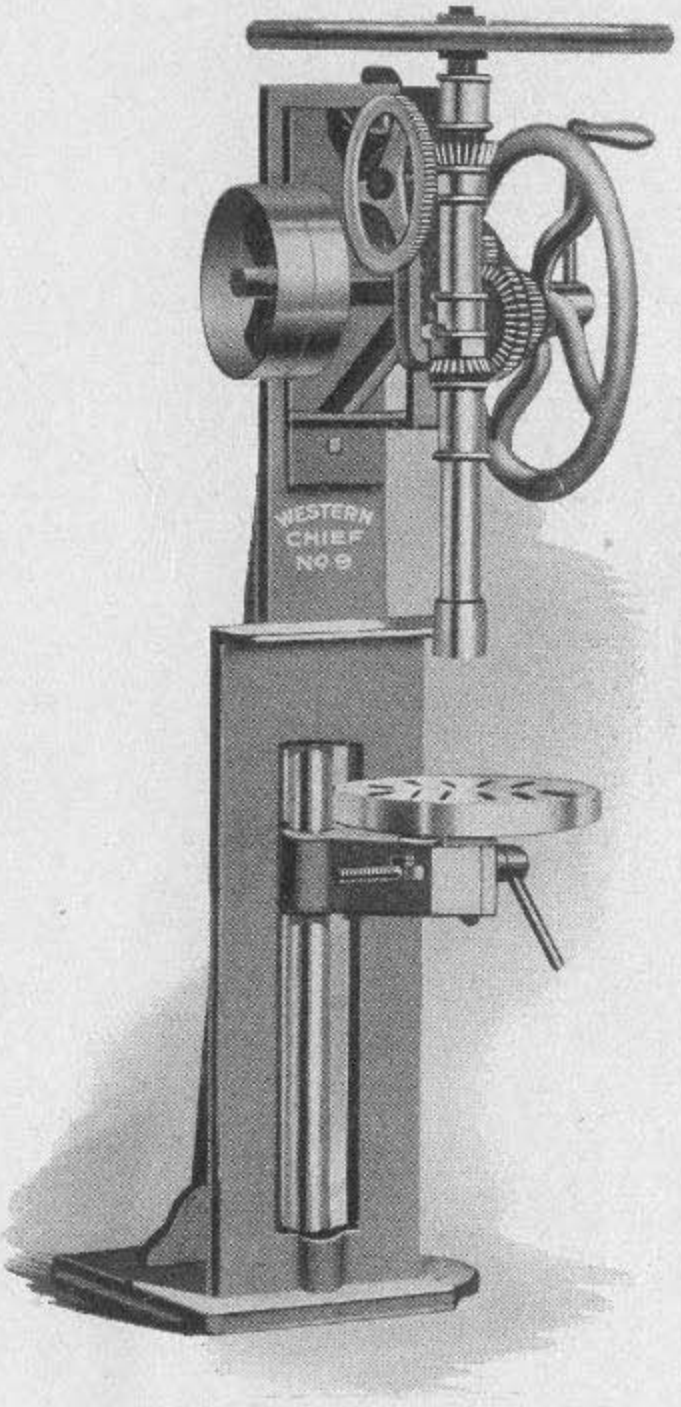
Spindle bored for ½ or $\frac{41}{64}$ inch shank bits.

Always state size when ordering.

Height, 60 inches.

Weight, 390 pounds.

It has a slotted table, which, in addition to swinging from side to side, also rotates, enabling the operator to bring his work under the bit at any place desired.

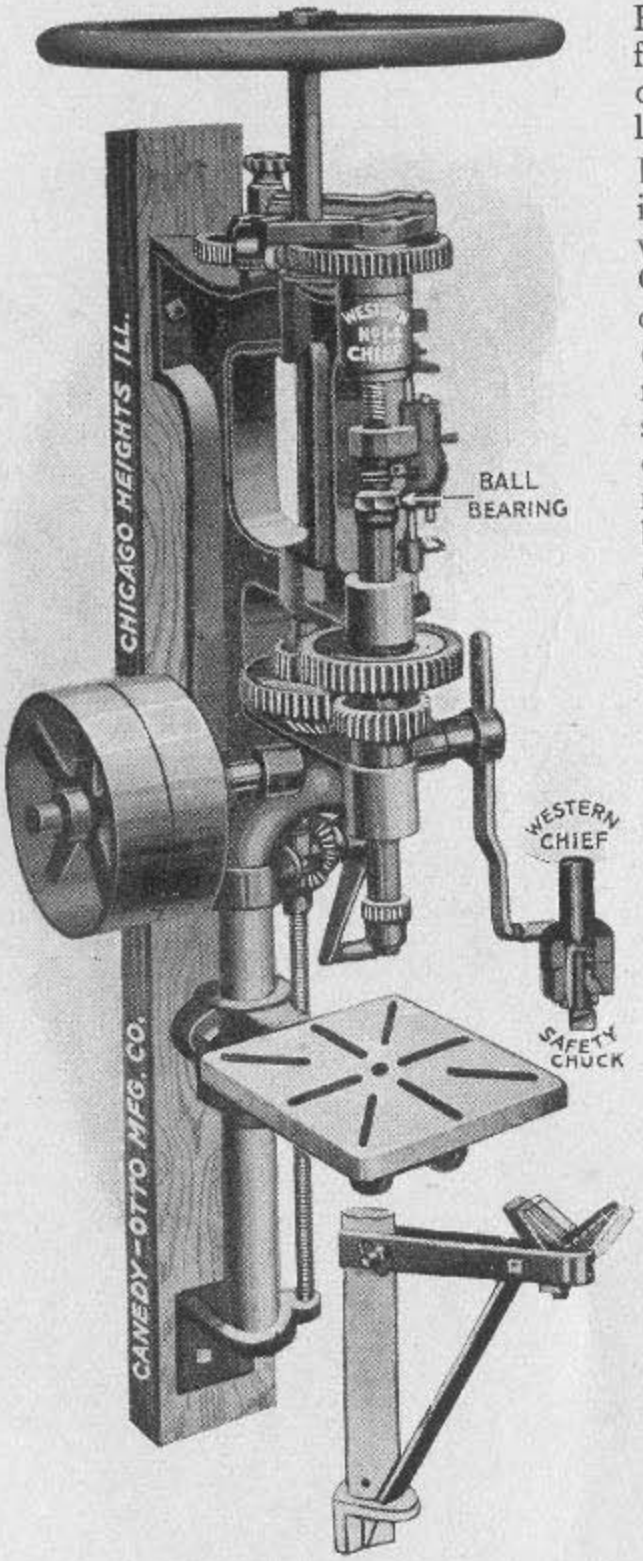


A second speed for heavy work is readily obtained by inserting the crank handle into rim of fly-wheel.

List Price $35.00

MFG. COMPANY
Chicago Heights
Illinois

Western Chief Drill No. 14



Straight and Bevel Gears are cut. Fast and Slow Speed, instant change. Horizontal, gear-driven, positive, self-feed, changeable instantly to fast, slow or medium, as desired. Raise and lower device to table.

It has automatic quick return, allowing rapid withdrawal of the bit at will, without **stopping or reversing** machine. Or, it can be set to drill any depth desired and will **automatically** (whether running by power or hand) reverse itself, withdraw the bit and start drilling again and again indefinitely, all without stopping the motion of the machine, or turning it backward. This feature is independent of Drill, and need not be used unless desired.

Drills to center of 21 inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle, 4 inches.

Up and Down run of Table, 16½ inches.

Greatest distance from Table to Spindle, 18 inches.

Size of Pulleys, 10¾x2½ inches.

Should run 175 to 180 revolutions per minute.

Spindle bored for ½ or $\frac{41}{64}$ inch shank bits. Always state size when ordering.

Weight, Hand Power, 295 pounds.

Weight, Hand and Power, 315 pounds.

Wheel Rims can be drilled by removing table and using the forked support as a wheel-holder. A special Wheel-holder Attachment, as illustrated, is furnished, when ordered, for $2.00 extra.

The Shaft on this Drill (when ordered Hand Power) is left extended to receive pulleys at any time thereafter. Always shipped without pulleys, unless ordered.

Wheel-holder Attachment, $2.00 extra.

List Price, Hand Power only **$38.50**

List Price, both Hand Power and Pulley Power (as illustrated) **42.50**

For List of Repairs See Page 178

Western Chief Drill No. 15

Chicago Heights
Illinois

Spur Gears are Cut. Back Geared. Self-feed.
Changeable Speed.

Drills to center of 19 inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle, 4 inches.

Up and Down run of Table, 11¾ inches.

Greatest distance from Table to Spindle, 13¼ in.

Size of Pulleys, 8x2½ in. Should run 200 revolutions per minute.

Spindle bored for ½ or $\frac{41}{64}$ inch shank bits. Always state size when ordering.

WEIGHT

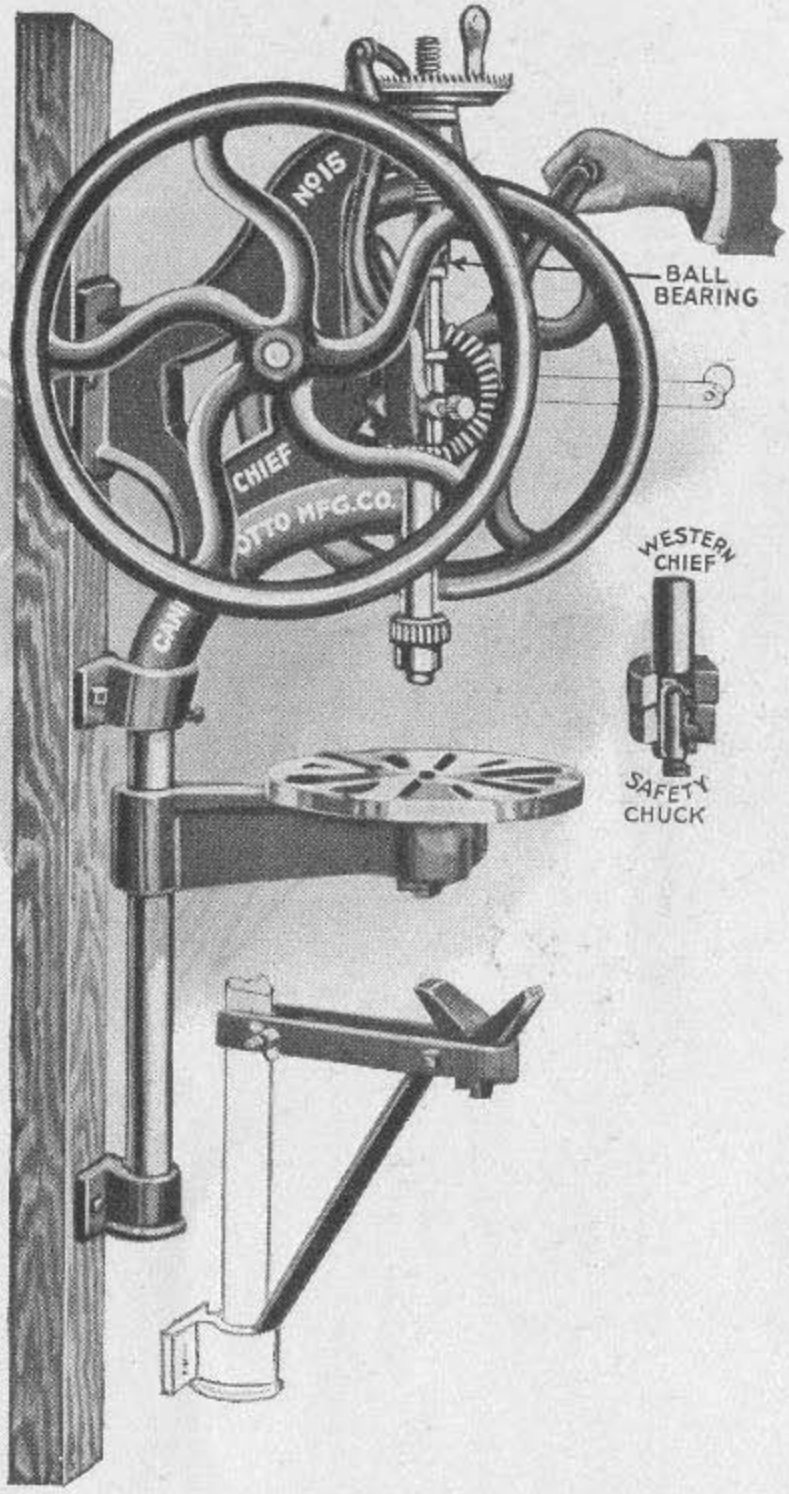
Hand Power	180 lbs.
Hand and Power	190 lbs.

Has Two Speeds, Fast and Slow, and for heavy drilling the slow speed is instantly obtained by inserting the crank handle in rim of fly-wheel.

The shaft on this drill (when ordered Hand Power) is left extended to receive pulleys at any time thereafter.

Wheel Rims can be drilled by removing the table and using the forked support as a wheel-holder. A special Wheel-holder Attachment, as illustrated, is furnished, when desired, for $2.00 extra.

Always shipped without pulleys, unless ordered.



Wheel-holder Attachment, $2.00 extra.

List Price, Hand Power (as illustrated) **$17.50**
List Price, Hand and Pulley Power **19.50**

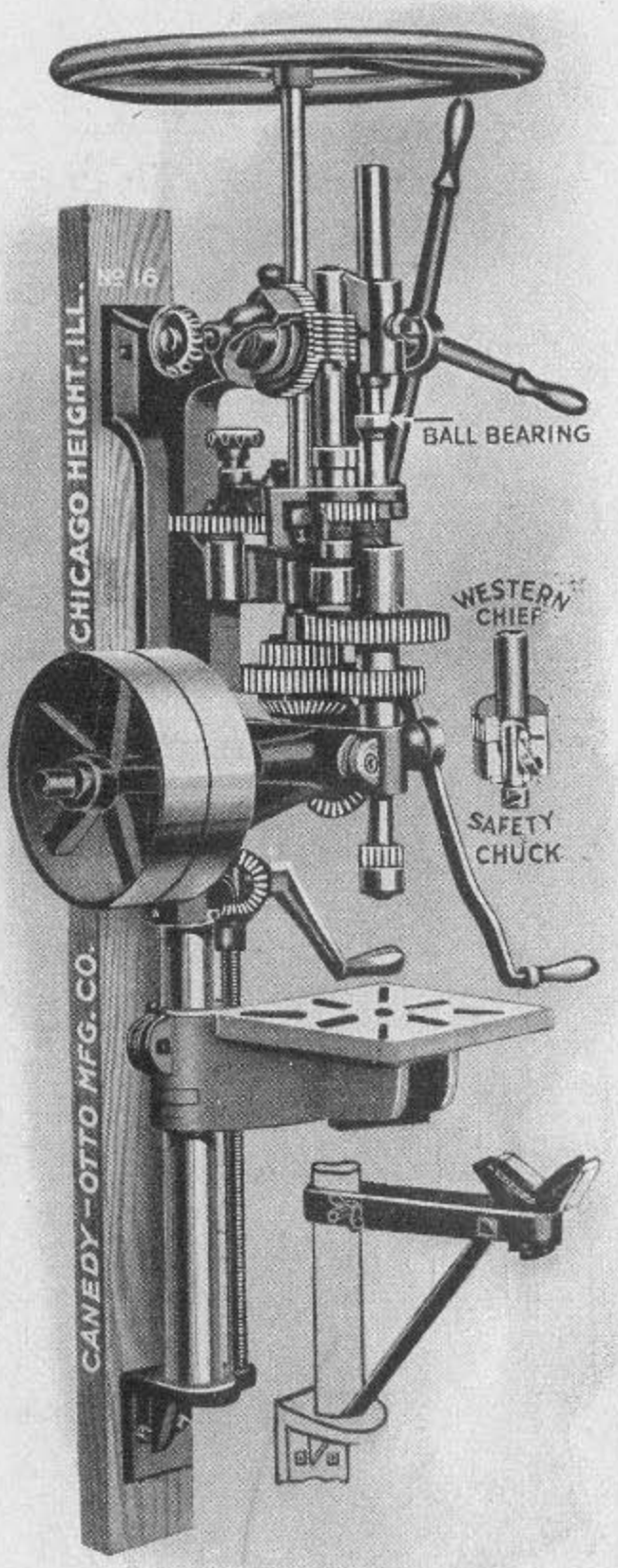
For List of Repairs See Page 174

MFG. COMPANY

Chicago Heights
Illinois

Western Chief Drill No. 16

Largest Post Drill Made. A Post Drill with the Fine Features of Machine Shop Floor Drills



Straight and Bevel Gears are cut.

Fast and Slow Speed, instant change.

Hand Lever Feed, also Horizontal Gear-driven Positive Self-feed, changed to fast, slow or medium speed instantly. These feeds work independently of each other, and bit is lifted quickly.

Raise and lower device to Table.

Drills to center of 24 inch circle. Bores 0 to 1½ inches.

Up and Down run of Spindle, 6¼ inches.

Up and Down run of Table, 15½ inches.

Greatest distance from Table to Spindle, 18½ inches.

Size of Pulleys, 10¾x2½ inches.

Should run 175 to 180 revolutions per minute.

Spindle bored for ½ or $\frac{11}{64}$ inch shank bits. Always state size when ordering.

Weight, Hand Power, 340 lbs.

Weight, Hand and Power, 360 lbs.

Wheel Rims can be drilled by removing table and using the forked support as a wheel-holder.

When ordered Hand Power only, the shaft is left extended, so that Pulleys may be placed at any time.

Always shipped without Pulleys, unless ordered.

List Price, Hand Power only $42.50

List Price, with Pulleys (as illustrated) $46.50

For List of Repairs See Page 180

Western Chief Drill No. 17

Chicago Heights
Illinois

A Finished Floor Drill, Both Hand and Pulley Power.

Straight and Bevel Gears are cut.

Fast and Slow Speed, instant change.

Hand Lever Feed, also Horizontal Gear-driven Positive Self-feed, changed to fast, slow or medium instantly. These feeds work independently of each other, and bit is lifted quickly.

Raise and lower device to Table.

Drills to center of 24 inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle, 6¼ inches.

Up and Down run of Table, 15½ inches.

Greatest distance from Table to Spindle, 18½ inches.

Height of Machine, 71 inches. Floor space, 15x26 inches.

Size of Pulleys, 10¾x2½ inches. Should run 175 to 180 revolutions per minute.

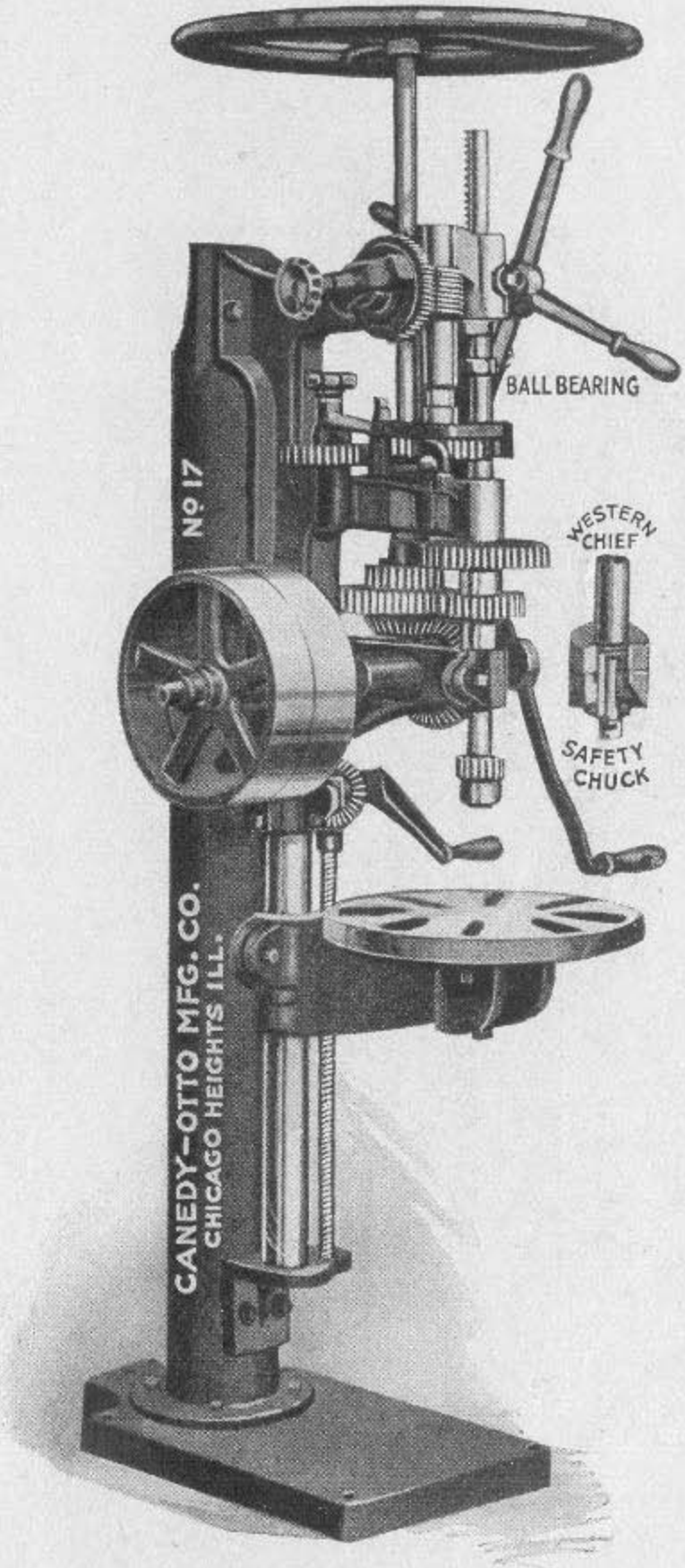
Spindle bored for ½ or $\frac{11}{64}$ inch shank bits.

Always state size when ordering.

When specially ordered we will bore spindle to receive No. 3 Morse taper.

Weight, 535 pounds.

Wheel Rims can be drilled by removing table and using forked support as a wheel-holder. Special Wheel-holder Attachment can be furnished for $2.00 net.

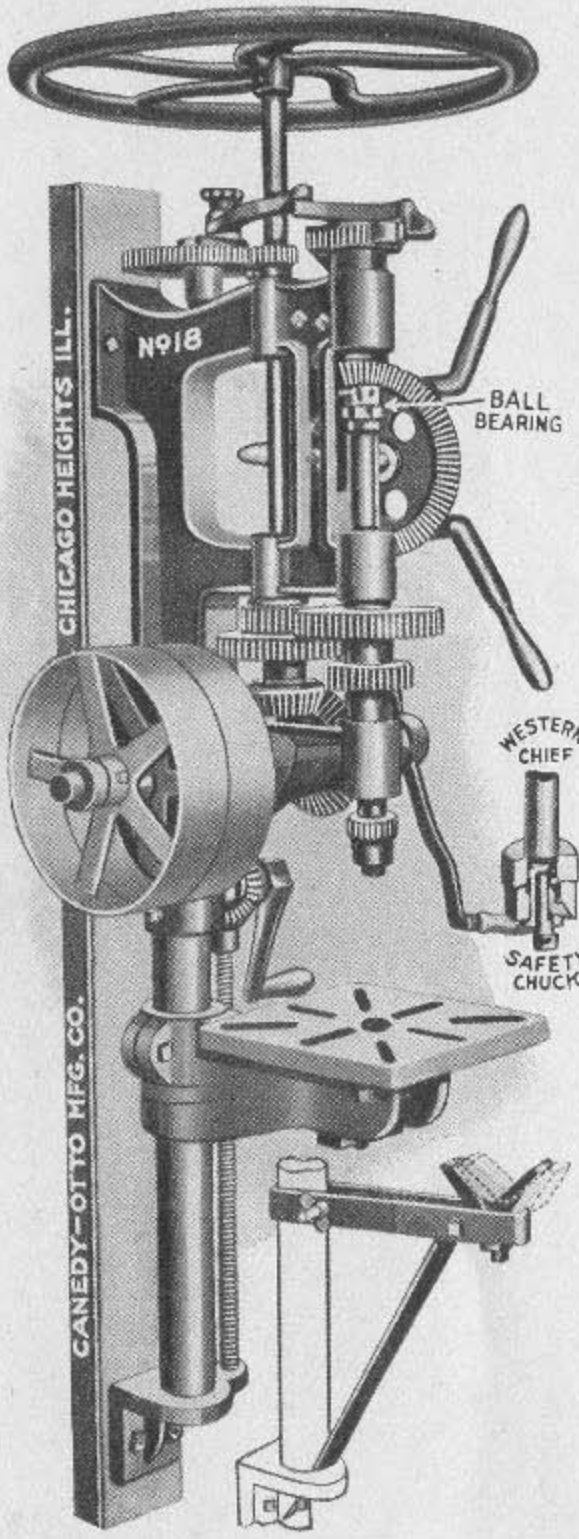


List Price, Hand and Pulley Power (as illustrated) **$65.00**

For List of Repairs See Page 180

Chicago Heights
Illinois

Western Chief Drill No. 18



Spindle is equipped with Ball Bearings.

Straight and Bevel Gears are cut.

Fast and Slow Speed, instant change.

Horizontal Positive Gear-driven Self-feed, changeable instantly to fast, slow or medium, as desired.

Hand Lever Feed, working independent of Self-feed; the most powerful of any post drill on the market. Permits a quick lift or return of Spindle, an excellent feature for wood-boring.

Raise and lower device to Table.

Drills to center of 21 inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle, 5½ inches.

Up and Down run of Table, 16½ inches.

Greatest distance from Table to Spindle, 18 inches.

Size of Pulleys, 10¾x2½ inches. Should run 175 to 180 revolutions per minute.

Spindle bored for ½ or $\frac{41}{64}$ inch shank bits. Always state size when ordering.

Weight, Hand Power, 300 lbs.

Weight, Hand and Power, 320 lbs.

Wheel Rims can be drilled by removing table and using forked support as a wheel-holder.

When ordering Hand Power only, shaft is left extended so that pulleys may be placed at any time.

Always shipped without pulleys, unless ordered.

Special Wheel-holder Attachment, $2.00 extra.

List Price, Hand Power only.....$40.50
List Price, with Pulleys as (illustrated)..... 44.50

For List of Repairs See Page 182

A Low-priced Combined Hand and Self-feed Drill. Adapted to Ordinary Shop Use

The Hand and Self-feed are independent of each other, and for quick work, such as wood boring, it is unsurpassed, as bit is quick-lifted.

Drills to center of 16½ inch circle. Bores 0 to 1¼ inch.

Up and Down run of Spindle, 5½ inches.

Up and Down run of Table, 11 in.

Greatest distance from Table to Spindle, 14 inches.

Size of Pulleys, 8x2 inches.

Should run 190 to 200 revolutions per minute.

Spindle bored for ½ or $\frac{41}{64}$ inch shank bits. Always state size when ordering.

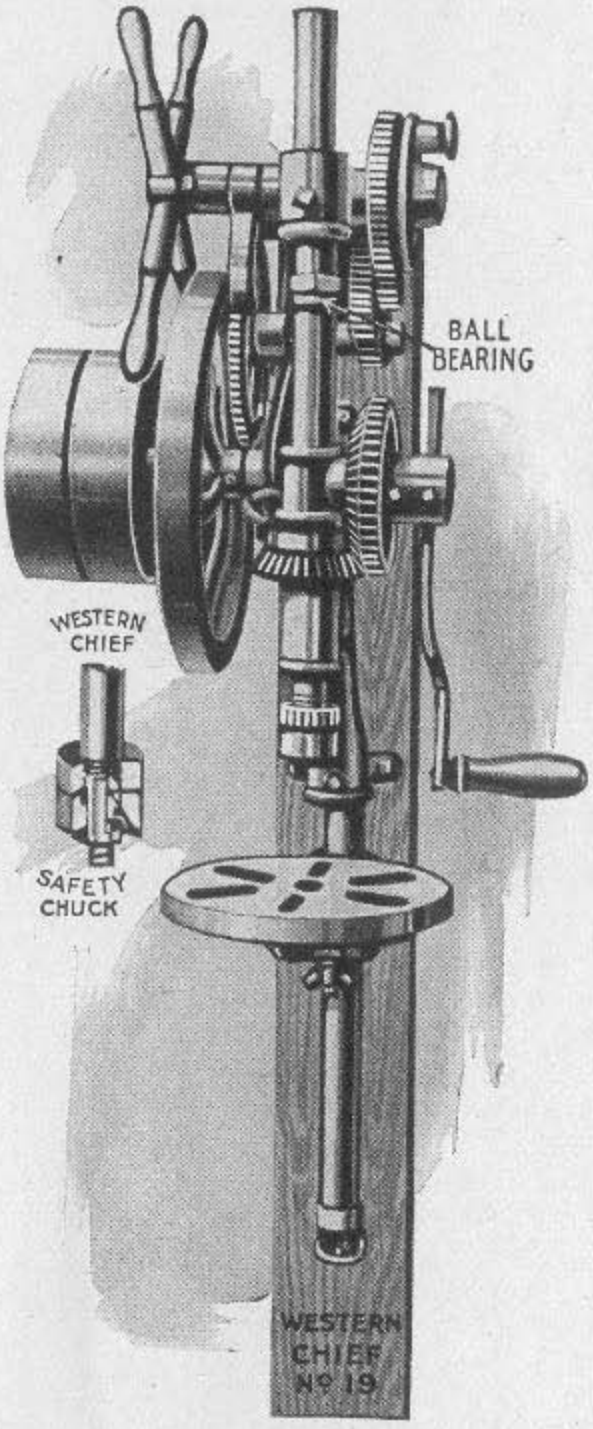
Weight, Hand Power, 130 lbs.

Weight, Hand and Power, 140 lbs.

When ordered Hand Power only, the shaft is left extended, so that Pulleys may be placed at any time.

Always shipped without Pulleys, unless ordered.

Wheel Rims can be drilled by removing table and using the forked support as a holder.



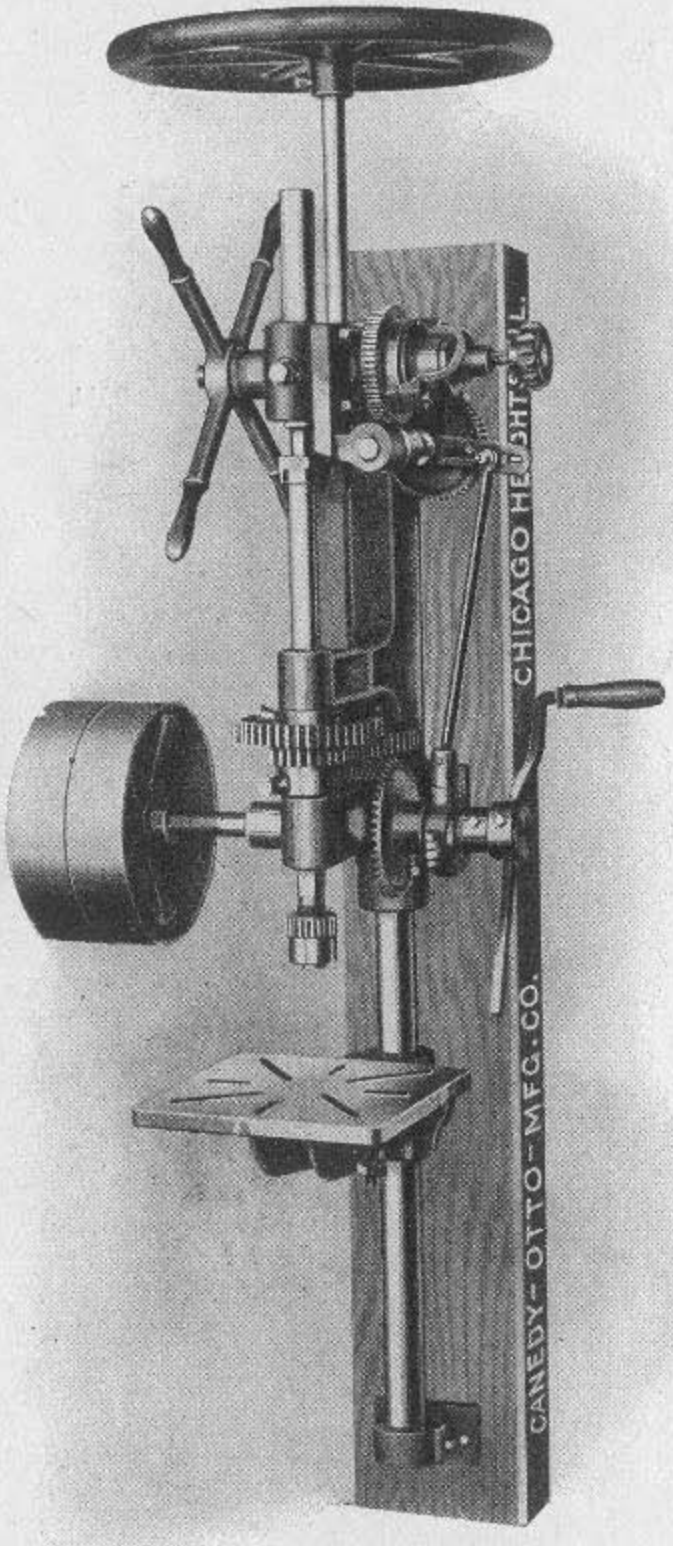
List Price, Hand Power only $18.00
List Price, with Pulleys (as illustrated) 20.00

For List of Repairs See Page 184

Chicago Heights
Illinois

Western Chief Drill No. 20

The Long Stroke Drill



All gears are cut.

Fast and Slow Speed, instant change.

Horizontal positive gear driven worm feed, changeable instantly to fast, slow or medium, as desired.

Has Up and Down run of Spindle of 8 inches, which is very important for shops, especially where wood work is done.

Drills to center of 18 inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle 8 inches.

Up and Down run of Table, 20 inches.

Greatest distance from Table to Spindle, 19 in.

Size of pulleys 10¾x2½ inches.

Should run 175 to 180 revolutions per minute.

Spindle bored for ½ or $\frac{11}{64}$ inch shank bits.

Always state size when ordering.

WEIGHT

Hand Power	270 lbs.
Hand and Power	290 lbs.

List Price, Hand Power only **$38.00**
List Price, with Pulleys (as illustrated) **42.00**

Western Chief Electric Drill No. 20

Chicago Heights
Illinois

A long stroke post drill equipped with a high class, powerful motor of the best make, costing less than 25c a day to operate.

There are no belts, the motor being directly connected with spur gear drive, accurately cut.

Fast and Slow Speed, instant change.

Horizontal positive gear driven worm feed, changeable instantly to fast, slow or medium, as desired.

Up and Down run of Spindle of 8 inches, which is very important for shops, especially where wood-work is done.

Drills to center of 18 inch circle.

Bores 0 to 1½ inches.

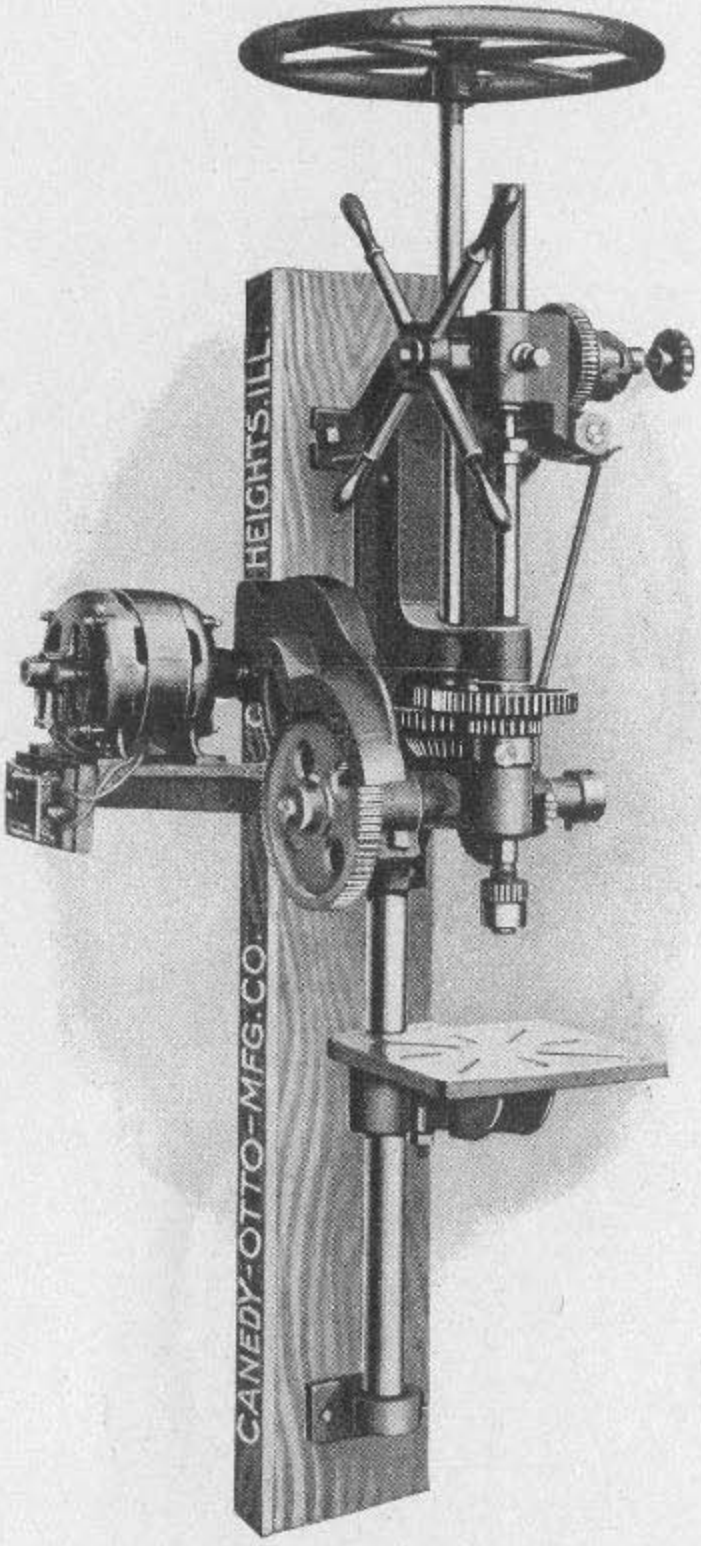
Up and Down run of Spindle, 8 inches.

Up and Down run of Table, 20 inches.

Greatest distance from Table to Spindle, 19 inches.

Spindle bored for ½ or $\frac{41}{64}$ inch shank bits. Always state size when ordering.

Weight, 350 pounds.

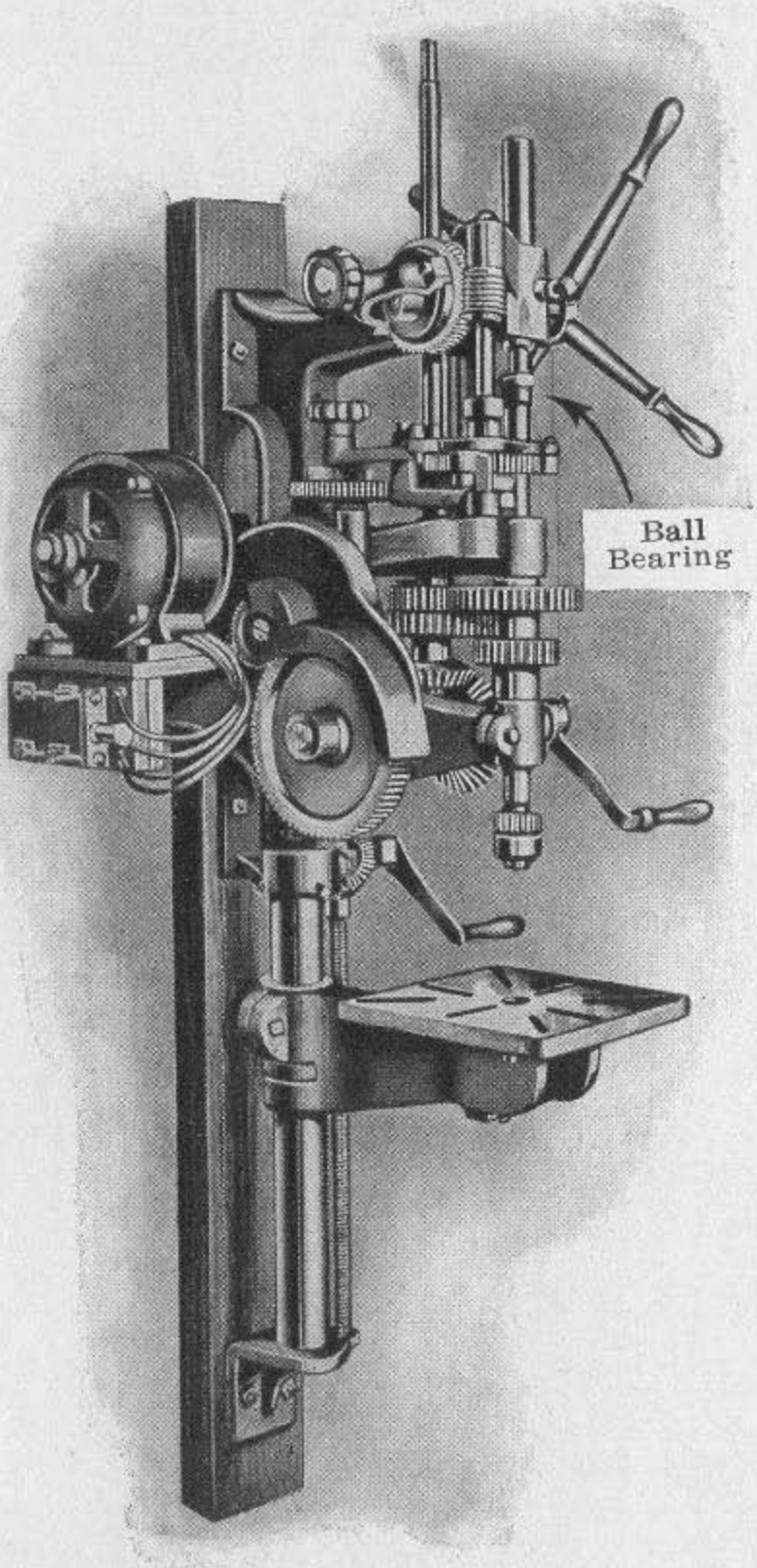


List Price (as illustrated) **$135.00**

MFG. COMPANY
Chicago Heights
Illinois

Western Chief Electric Drill No. 16

Post Drill with the fine features of a machine shop floor drill, equipped with a high-class, powerful motor of the best make, costing less than 25c a day to operate. There are no belts, the motor being directly connected with spur gear drive, accurately cut.



Fast and Slow Speed, instant change.

Hand Lever Feed, also Horizontal Gear-driven Positive Self-feed, changed to fast, slow or medium speed instantly. These feeds work independently of each other, and bit is lifted quickly.

Raise and lower device to Table.

Drills to center of 24 inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle, 6¼ inches.

Up and Down run of Table, 15½ inches.

Greatest distance from Table to Spindle, 18½ inches.

Spindle bored for ½ or $\frac{11}{64}$ inch shank bits. Always state size when ordering.

Weight, 400 pounds.

Wheel Rims can be drilled by removing table and using the forked support as a wheel-holder.

Special Wheel-holder Attachment, $2.00 extra.

List Price (as illustrated) **$150.00**

For List of Repairs See Page 180

Western Chief Electric Drill No. 17

Chicago Heights
Illinois

A finished Floor Drill, equipped with a high-class powerful motor of the best make, costing less than 25c a day to operate. There are no belts, the motor being directly connected with spur gear drive.

Straight and Bevel Gears are cut.

Fast and Slow Speed, instant change.

Hand Lever Feed, also Horizontal Gear-driven Positive Self-feed, changed to fast, slow or medium speed instantly. These feeds work independently of each other, and bit is lifted quickly.

Raise and lower device to Table.

Drills to center of 24 inch circle.

Bores 0 to 1½ inches.

Up and Down run of Spindle, 6¼ inches.

Up and Down run of Table, 15½ inches.

Greatest distance from Table to Spindle, 18½ in.

Height of Machine, 71 inches.

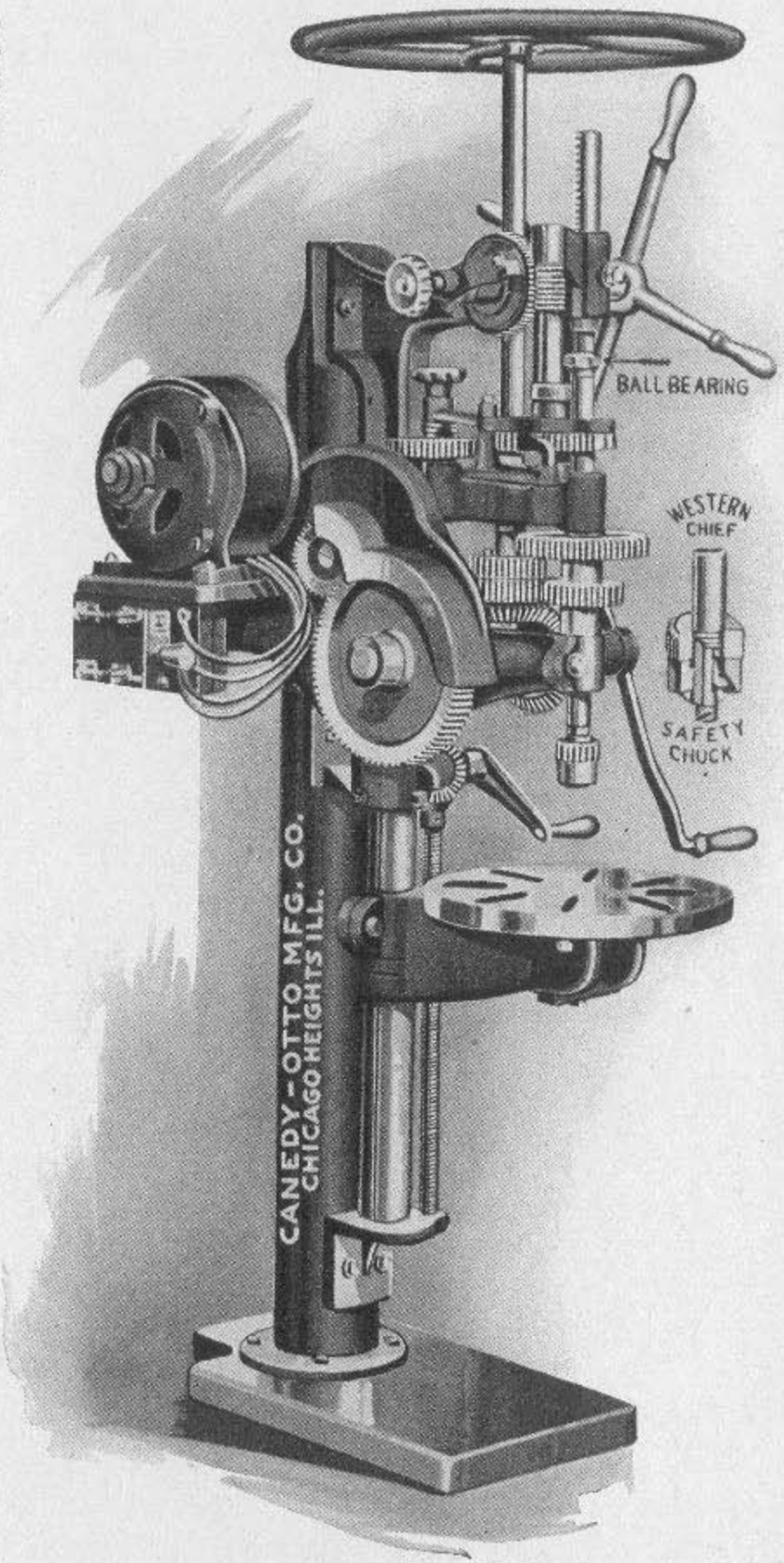
Floor space, 15x26 inches.

Spindle bored for ½ or $\frac{41}{64}$ inch shank bits. Always state size when ordering.

When specially ordered, we will bore Spindle to receive No. 3 Morse taper.

Weight, 590 pounds.

Wheel Rims can be drilled by removing table and using the forked support as a wheel-holder. Special Wheel-holder Attachment can be furnished for $2.00 net.



For List of Repairs See Page 180

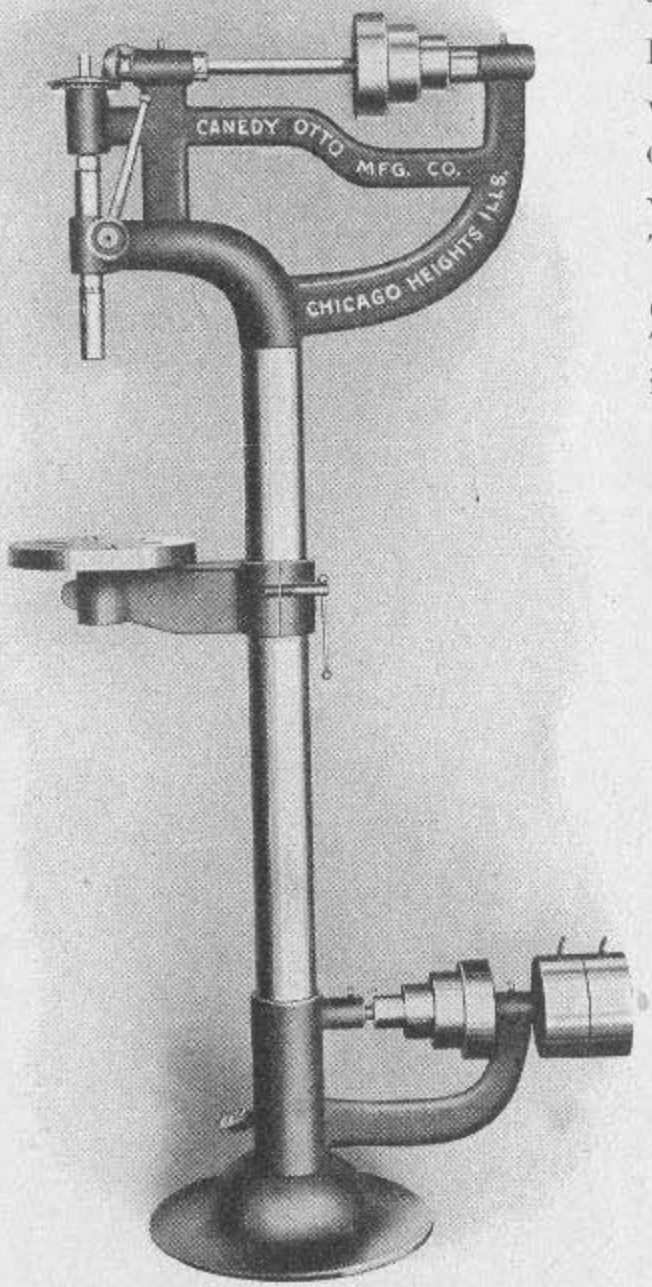
List Price $175.00

MFG. COMPANY

Chicago Heights
Illinois

Western Chief Sensitive Floor Drill No. 27

For Light and Rapid Drilling



Drills to center of 16 inch circle.

Bores 0 to $\frac{12}{32}$ inch.

Vertical traverse of Spindle, 4 inches.

Vertical traverse of Table, 2 feet 8½ inches.

Greatest distance from Table to Spindle, 2 feet 7 inches.

Diameter of Column, 3½ inches.

Size of tight and loose Pulley, 6x2½ inches.

Size of large Cone Pulley, 4¾x1¾ inches.

Size of second Cone Pulley, 4½x2¾ inches.

Size of Third Cone Pulley, 3¼x2¾ inches.

Size of small Cone Pulley, 2x2¾ inches.

Spindle is fitted with holes for drills having No. 2 taper shanks.

Height, 66 inches.

Weight, 210 pounds.

List Price $60.00

Bench Drill No. 28

For Light and Rapid Drilling

Drills to the center of a 9 inch circle.

Bores 0 to ½ inch.

Vertical traverse of Spindle, 3¼ inches.

Vertical traverse of Table, 8 inches.

Greatest Distance from Table to Spindle, 8 inches.

Diameter of Column, 2½ inches.

Size of tight and loose Pulleys, 4x1⅝ inches.

Should run 650 revolutions per minute.

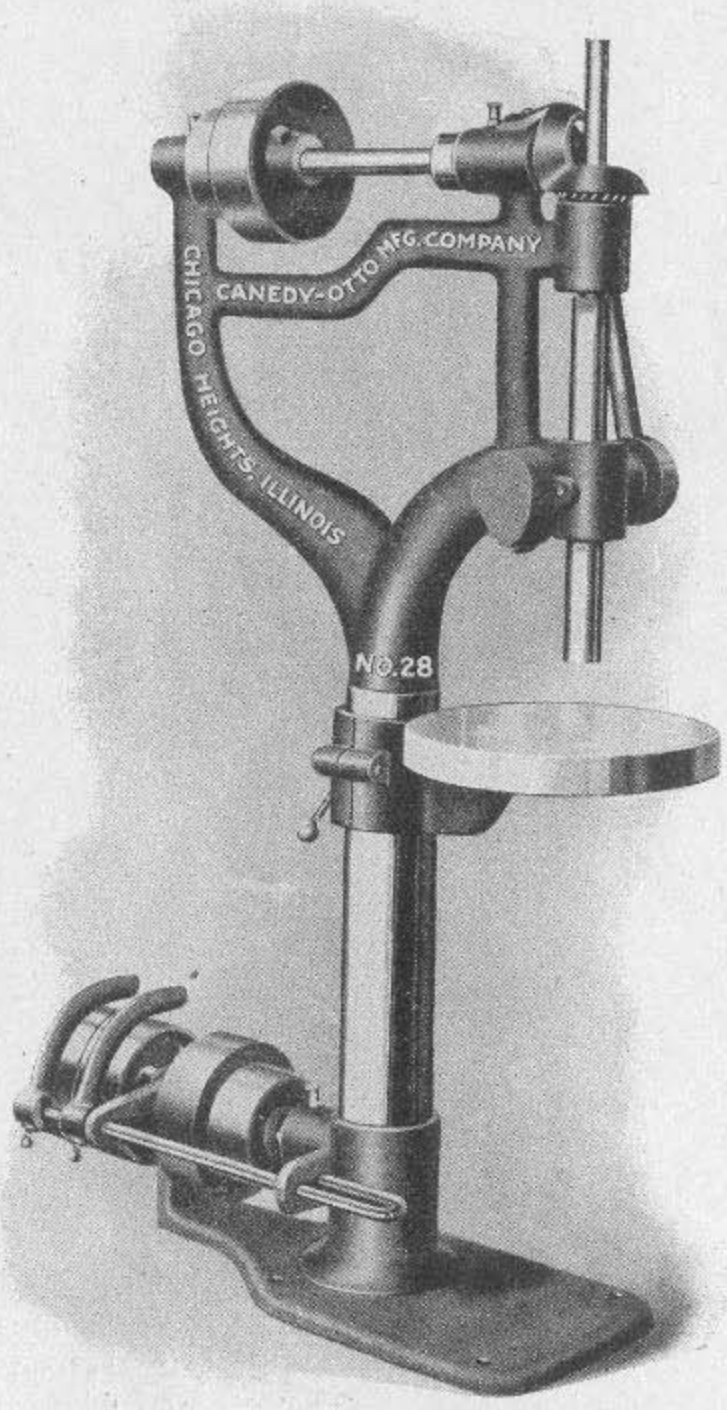
Size of large Cone Pulley, 4⅜x1½ inches.

Size of small Cone Pulley, 3x1½ inches.

Spindle is fitted with holes for drills having No. 1 taper shanks.

Height, 32 inches.

Weight, 85 pounds.

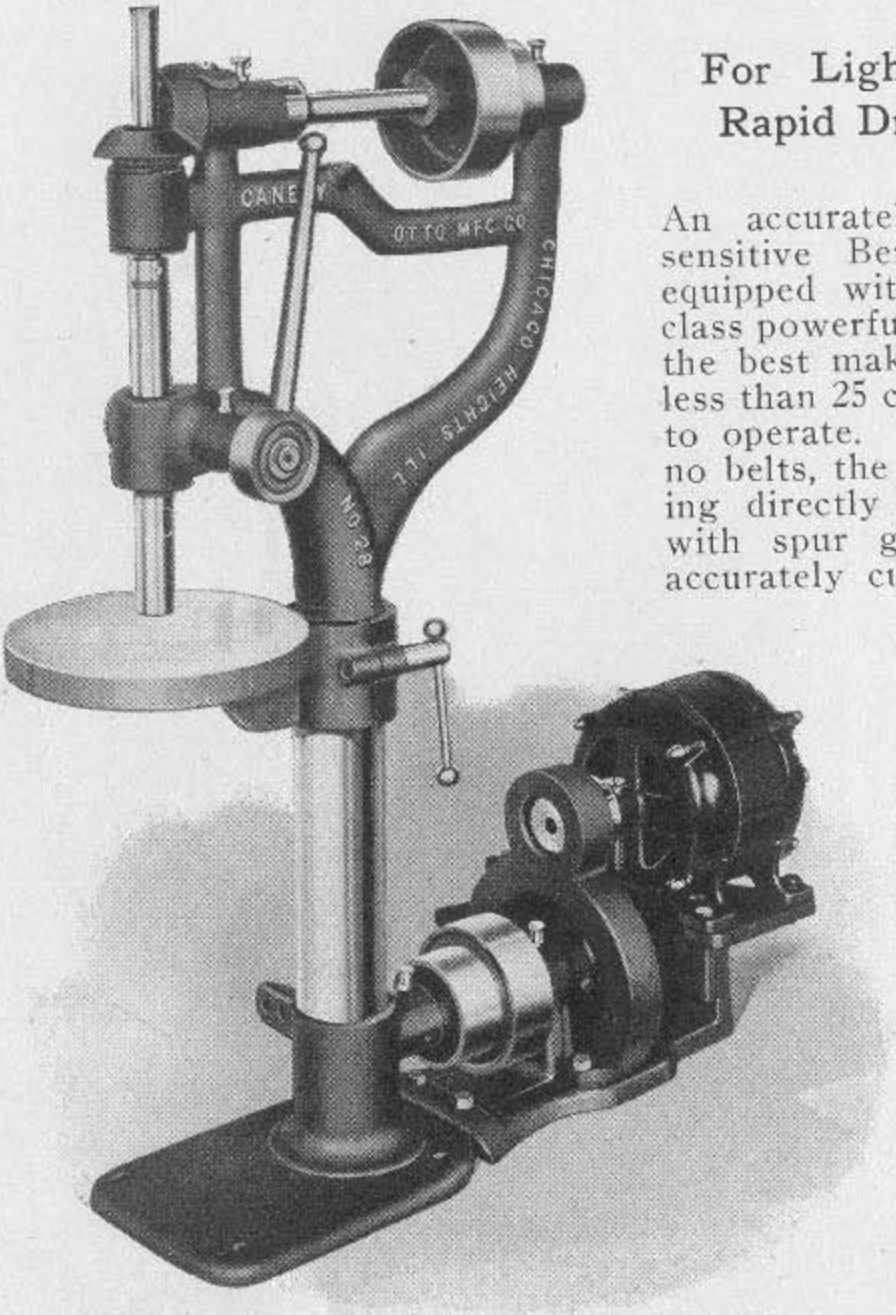


List Price $25.00

Chicago Heights
Illinois

Motor Driven Bench Drill

No. 28



For Light and Rapid Drilling

An accurately made sensitive Bench Drill, equipped with a high-class powerful motor of the best make, costing less than 25 cents a day to operate. There are no belts, the motor being directly connected with spur gear drive, accurately cut.

Drills to the center of 9 inch circle

Bores—0 to ½ inch
Vertical traverse of spindle—3¼ inches
Vertical traverse of table—8 inches
Greatest distance from table to spindle—8 inches
Diameter of column—2½ inches
Size of large cone pulley—4⅜x1½ inches.
Size of small cone pulley—3x1½ inches
Spindle is fitted with holes for drills having No. 1 taper shanks.
Height, 32 inches; Weight, 120 pounds

List Price $85.00

Description of Nos. 30 and 31 Drills

For illustration, see pages 122, 123 and 124.

Height of Drill 67 inches.

Greatest distance between round base and spindle, 42½ inches.

Greatest distance between square base and spindle, 41 in.

Greatest distance between table and spindle, 29 inches.

Travel of spindle, 9 inches.

Diameter of spindle in sleeve, $1\frac{5}{16}$ inches.

Diameter of spindle above sleeve, 1¼ inches.

Spindle bored to receive No. 3 Morse taper.

Feeds of bit per revolution of spindle, .005, .015, .030 inches.

Drills to center of 21-inch circle.

Diameter of table, 16 inches.

Diameter of column, 5⅝ inches.

Travel of table on column, 18½ inches.

Diameter of spur gears, $7\frac{7}{16}$, 5⅞, 4⅝ and 3 inches.

Size of pulleys, 8x2½ inches.

Pulleys should be speeded to run about 425 revolutions per minute.

Floor space required for round base, 28x20 inches.

Floor space required for square base, 38x15 inches.

Weight, net, round base, 570 lbs.

Weight, net, square base, 660 lbs.

Add for machine crated, about 50 lbs.

Superior Points

No cone pulleys to wear out belts.

No countershaft on the floor to gather up dirt and wear out.

More power, because gears substitute cone pulleys and gears do not slip.

More wearing surface, because bearings are larger.

Better adapted to use of "high-speed" bits, because of greater power and speed combined.

No loose gears on shaft to run idle and wear out. All gears turn with the shafts, insuring a true-running and long-lasting gear.

Four changes of speed by shifting gears; more convenient and quicker than shifting a belt.

Better self-feed, because independent of lever feed; built strong; no loose joints, and has automatic stop. (Self-feed Automatic Stop on No. 31 only.)

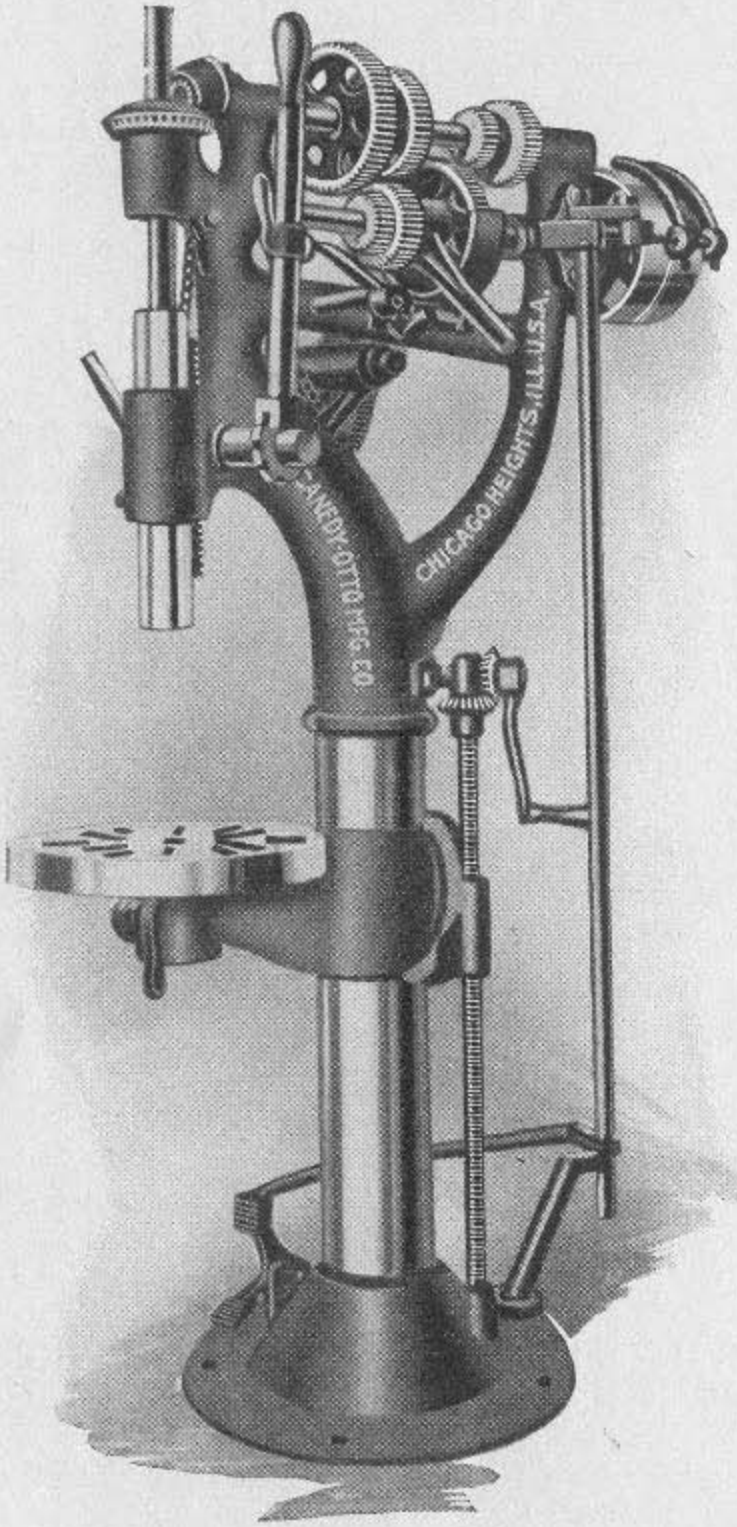
Gears are noiseless, because cut by modern methods and special tools. No clutches to wear, get loose or fail to work.

Both table and supporting arm can be clamped tight in position by use of clamp screws with lever handles, thus avoiding use of separate wrenches.

Spindle is equipped with ball bearings.

More power and speed combined than any 20-inch drill on the market.

Canedy-Otto 20-Inch Upright Drill No. 30



No. 30 Drill

Is furnished with Lever Feed only.

No. 30 Drill

Is furnished with Round or Square Base.

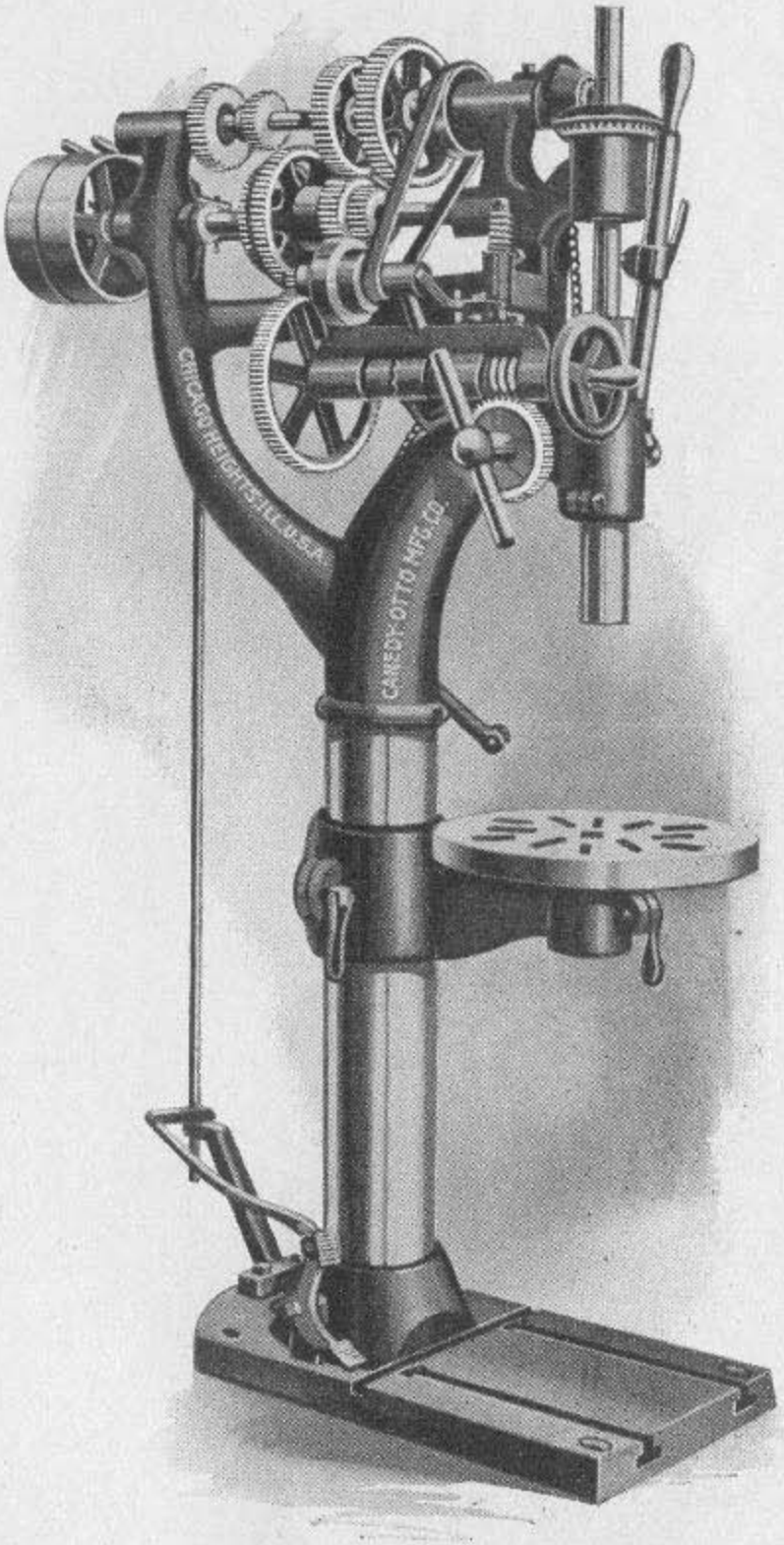
For description, see page 121

Canedy-Otto 20-Inch Upright Drill No. 31

Chicago Heights
Illinois

No. 31 Drill

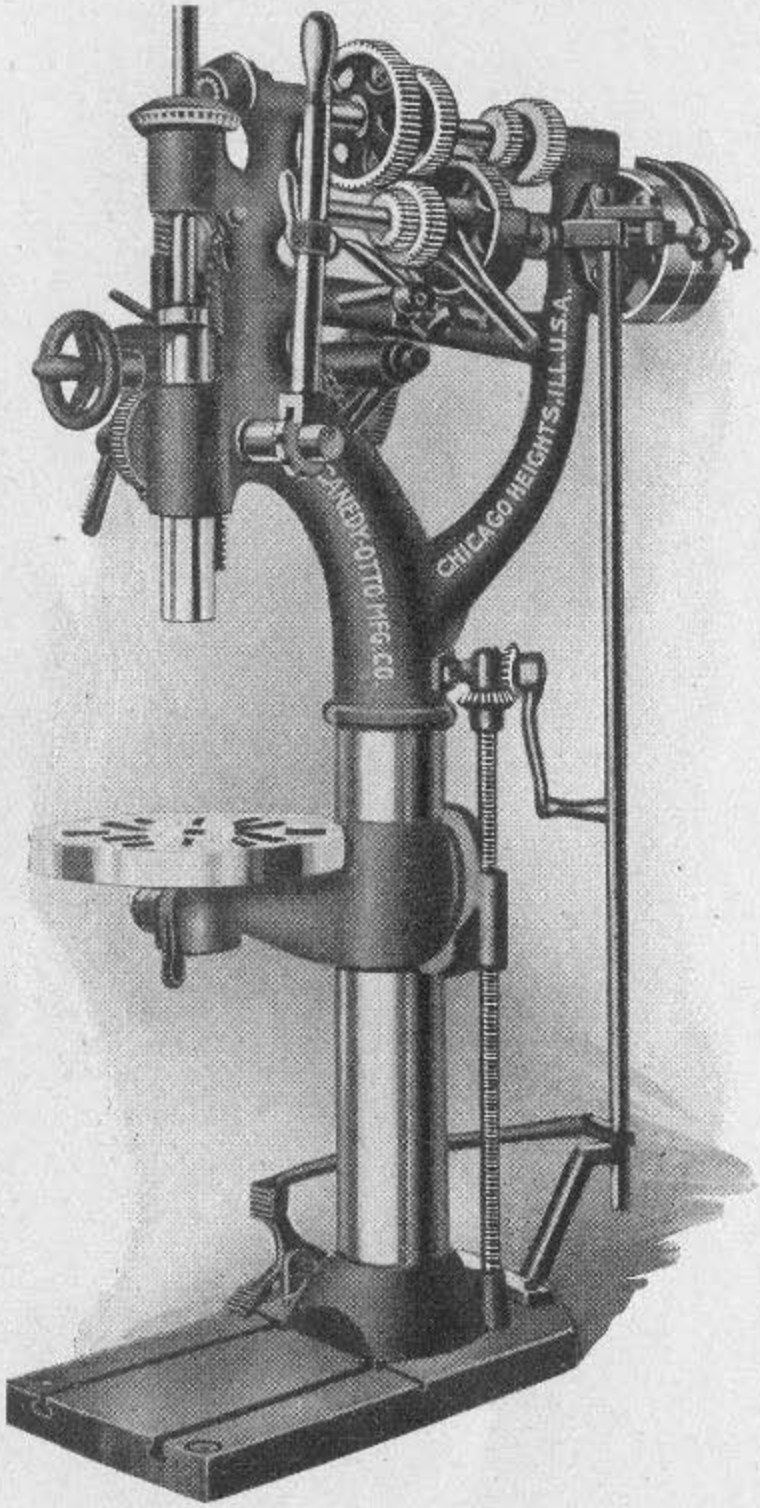
Left side view. Has both Lever and Self-feed



For description see page 121.

All Gearing has proper shield guards to prevent injury to operator, though not shown in illustrations.

Canedy-Otto 20-Inch Upright Drill No. 31



No. 31 Drill

Right side view. Has both Lever and Self-feed.

For description, see page 121.

No. 31 Drill is furnished with Square Base, has Hand-lever Feed, also Power Self-feed with Automatic Stop.

No. 33 Power Drill

Chicago Heights
Illinois

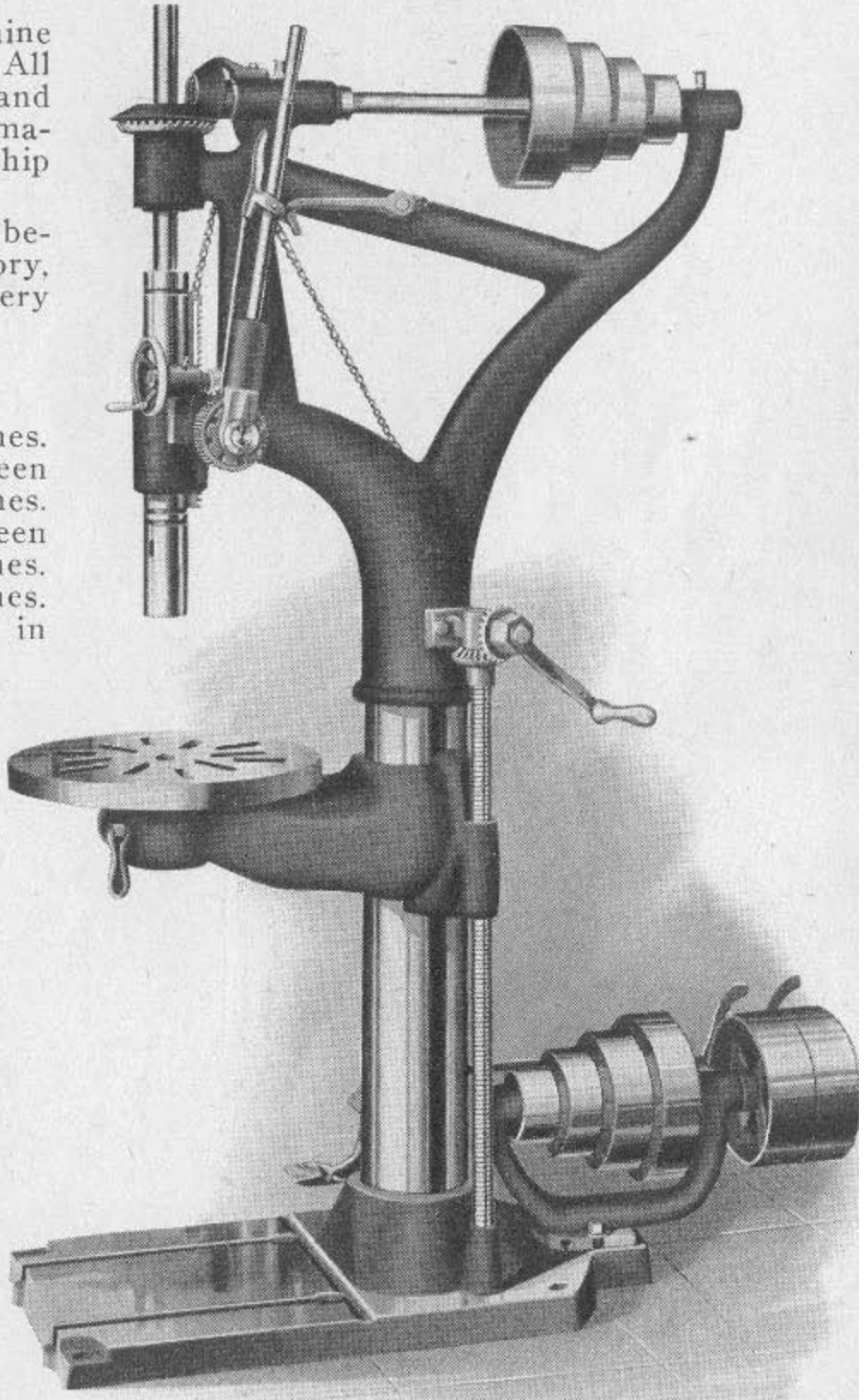
New and Improved 20-inch Type Model. Is equipped for hand lever feed or wheel and lever feed only

A very valuable machine for all-around work. All parts are solid, simple and compact. The best of material and workmanship used throughout.

All machines are tested before leaving the factory, and guaranteed in every respect.

DESCRIPTION

Height of drills, 72 inches.
Greatest distance between base and spindle, 37 inches.
Greatest distance between table and spindle, 25 inches.
Travel of spindle, 9 inches.
Diameter of spindle in sleeve, $1\frac{5}{8}$ inches.
Spindle socket, No. 3 Morse.
Drills to center of 21 inch circle.
Diameter of table, 16 inches.
Diameter of column, $5\frac{5}{8}$ inches.
Travel of table on column, 17 inches.
Size of cone pulleys, $8\frac{7}{8}$, $7\frac{1}{4}$, $5\frac{5}{8}$, 4x$2\frac{1}{4}$ inch face.
Diameter of tight and loose pulleys, 8x$2\frac{1}{2}$ inch face.
Speed of countershaft, about 380 R. P. M.
Net weight, 680 pounds, No. 36.
Net weight, 590 pounds, No. 35.



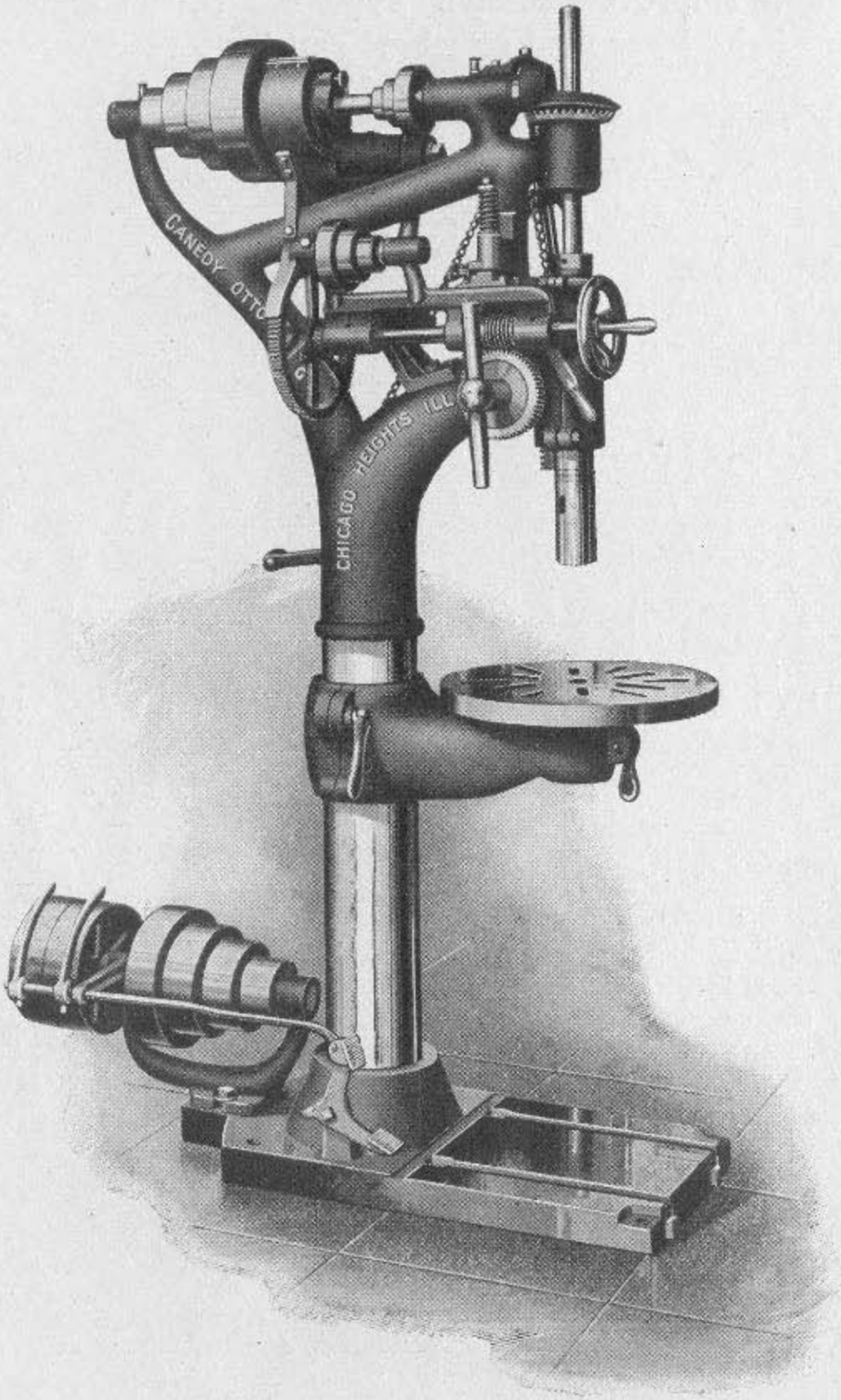
List Price $115.00

MFG. COMPANY

Chicago Heights
Illinois

No. 36 Power Drill

New and Improved 20-inch Type Model



Model No. 36 has back gear, power feed and automatic stop.

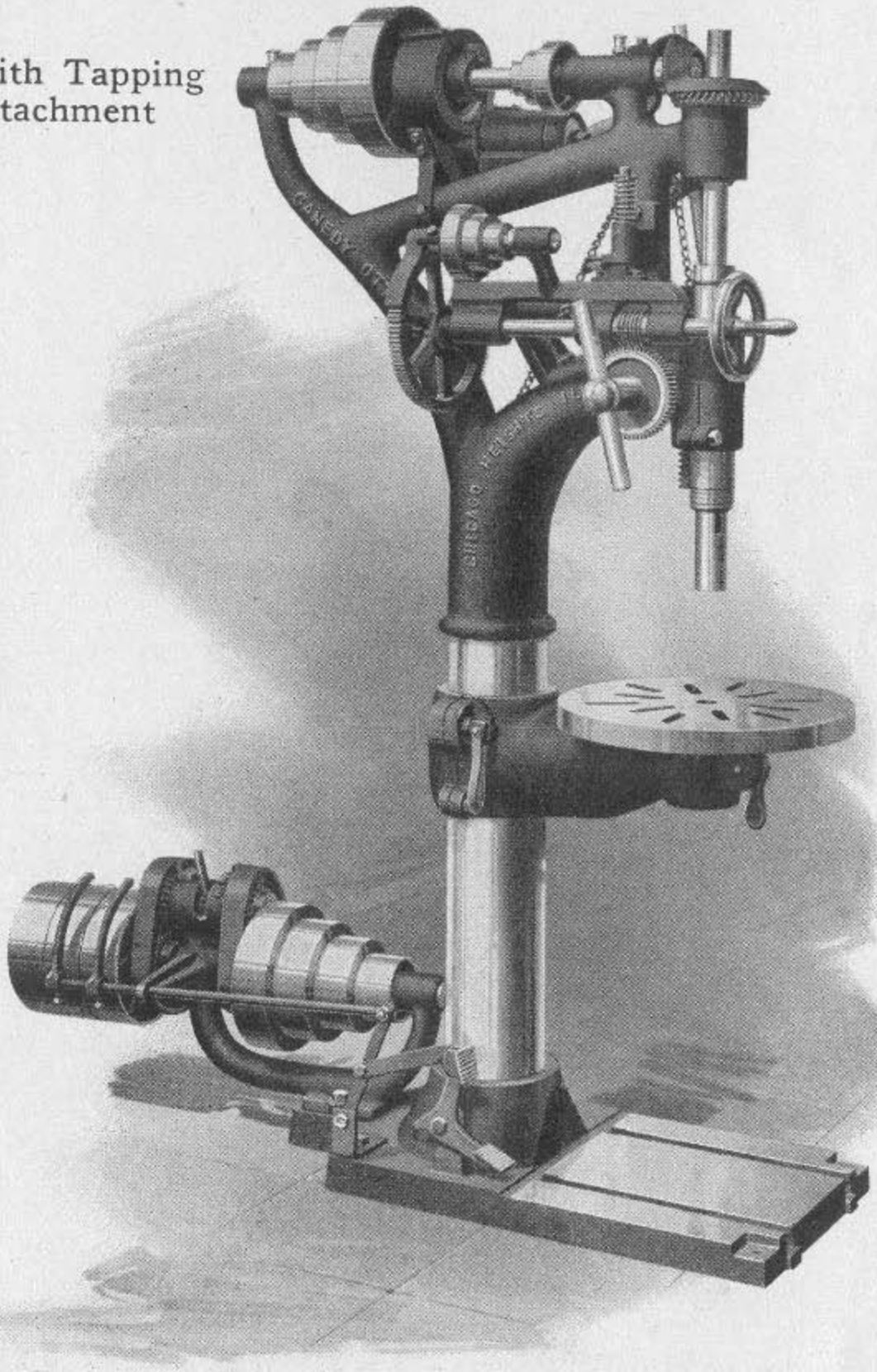
For description see page 125

List Price $150.00

No. 30, 20-in. Upright Back Geared Drill

Chicago Heights
Illinois

With Tapping Attachment

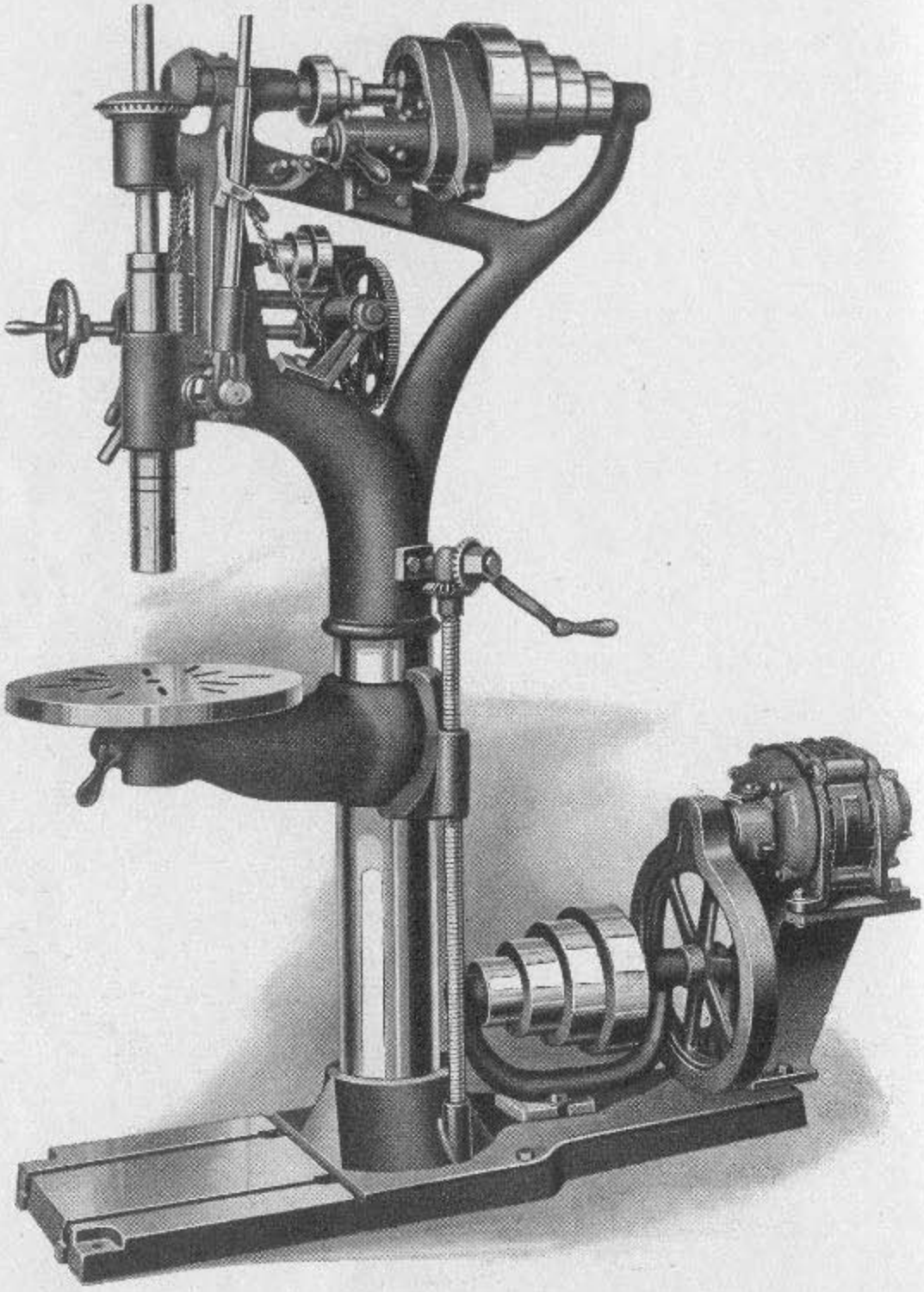


An improved tapping attachment of very few parts, yet accurate, powerful, and rapid in operation. Operated by foot, leaving the hands free to handle work. Net weight, 728 pounds.

For general description of drill see page 125

List Price $160.00

No. 36 Motor Driven 20-in. Upright Back Geared Drill



Equipped with high class, powerful motor. There are no belts, the motor being directly connected with spur gear drive, accurately cut. Net weight, 973 pounds.

For general description of drill see page 125

List Price $250.00

Upright Drill No. 40

Chicago Heights
Illinois

A new machine shop floor drill that has several desirable features not to be found on any other floor drill manufactured.

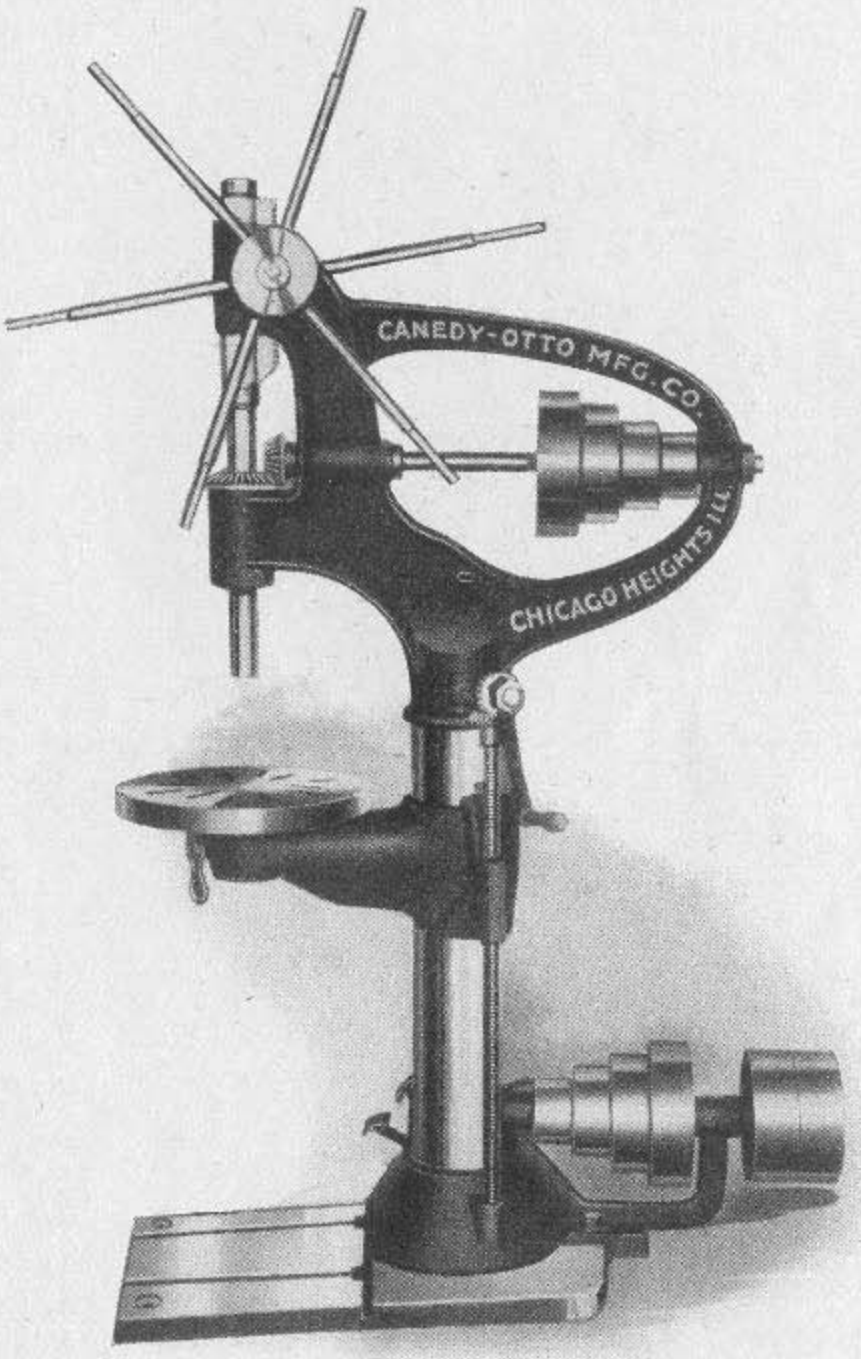
The spindle is solid, extra large and very rigid, and so constructed that the wear and looseness can be taken up at the bottom bearing, it being a split phosphor bronze bushing. The bearings both at the top and bottom are larger than on any 20 inch drill up to date.

The bevel gear drive is near the work, where it should be to get the most accurate results.

The long handled star lever hand feed is the most convenient and rapid method known to drill users.

The frame is heavy and so designed that it will resist heavy strains.

The drift hole is very convenient to get at, there being no sleeve to obstruct it.



List Price $95.00

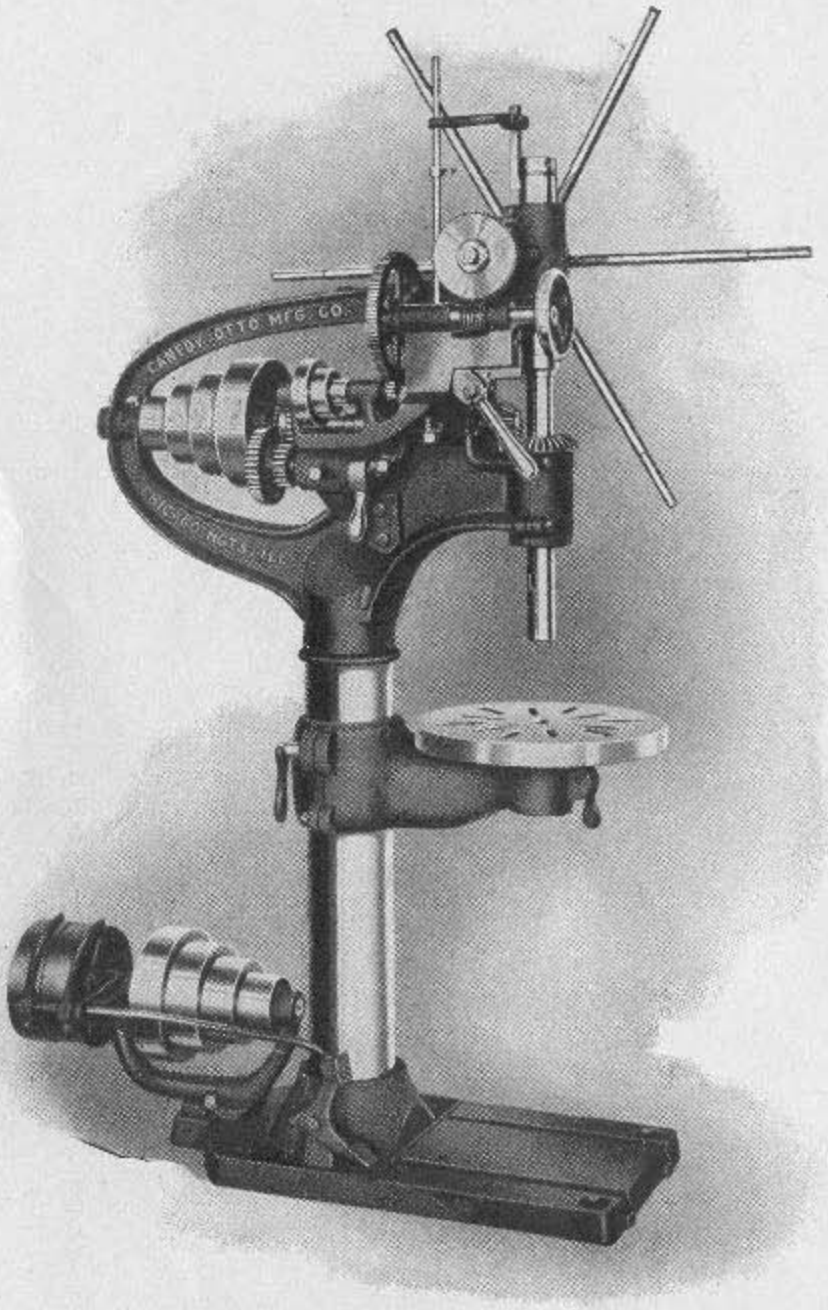
SPECIFICATIONS

Height of drill, 70″.
Greatest distance between base and spindle, 39″.
Greatest distance between table and spindle, 26½″.
Travel of spindle, 9½″.
Diameter of spindle in sleeve, $1\frac{5}{16}$″.
Diameter of spindle below sleeve, 1¾″.
Spindle socket No. 3, Morse.
Drills to center of 21″ circle.
Diameter of column, 5⅝″.
Diameter of table, 16″.
Size of cone pulleys, 8⅞″, 7¼″, 5⅝″, 4x2¼″ face.
Diameter of tight and loose pulleys, 8x2″ face.
Floor space required for drill, 20x36″.
Can furnish with round base when so ordered.
Speed of countershaft about 380 revolutions per minute.
Net weight, 580 pounds.

CANEDY - OTTO
MFG. COMPANY

Chicago Heights
I l l i n o i s

Canedy-Otto 20-Inch Upright Back Geared Drill No. 41



A new machine shop floor drill that has several desirable features, adapted for quick, accurate, heavy and light drilling. Its construction is quite different from and superior to the general run of drills. The bevel gear drive is placed near the work to be done, so as to get better results. The spindle is solid, extra large and very rigid, and so constructed that the wear and looseness can be taken up at the bottom bearing, it being a split phosphor bronze bushing. The bearings, both at the top and bottom, are larger than on any 20-inch drill up to date. The long handled star lever hand feed is the most convenient and rapid method known to drill users.

The frame is heavy and so designed that it will resist heavy strains.

The drift hole is very convenient to get at, there being no sleeve to obstruct it.

It is equipped with self-feed, having eight speeds, automatic stop and back gear.

Equipped with all necessary guards and safety appliances (not illustrated).

SPECIFICATIONS

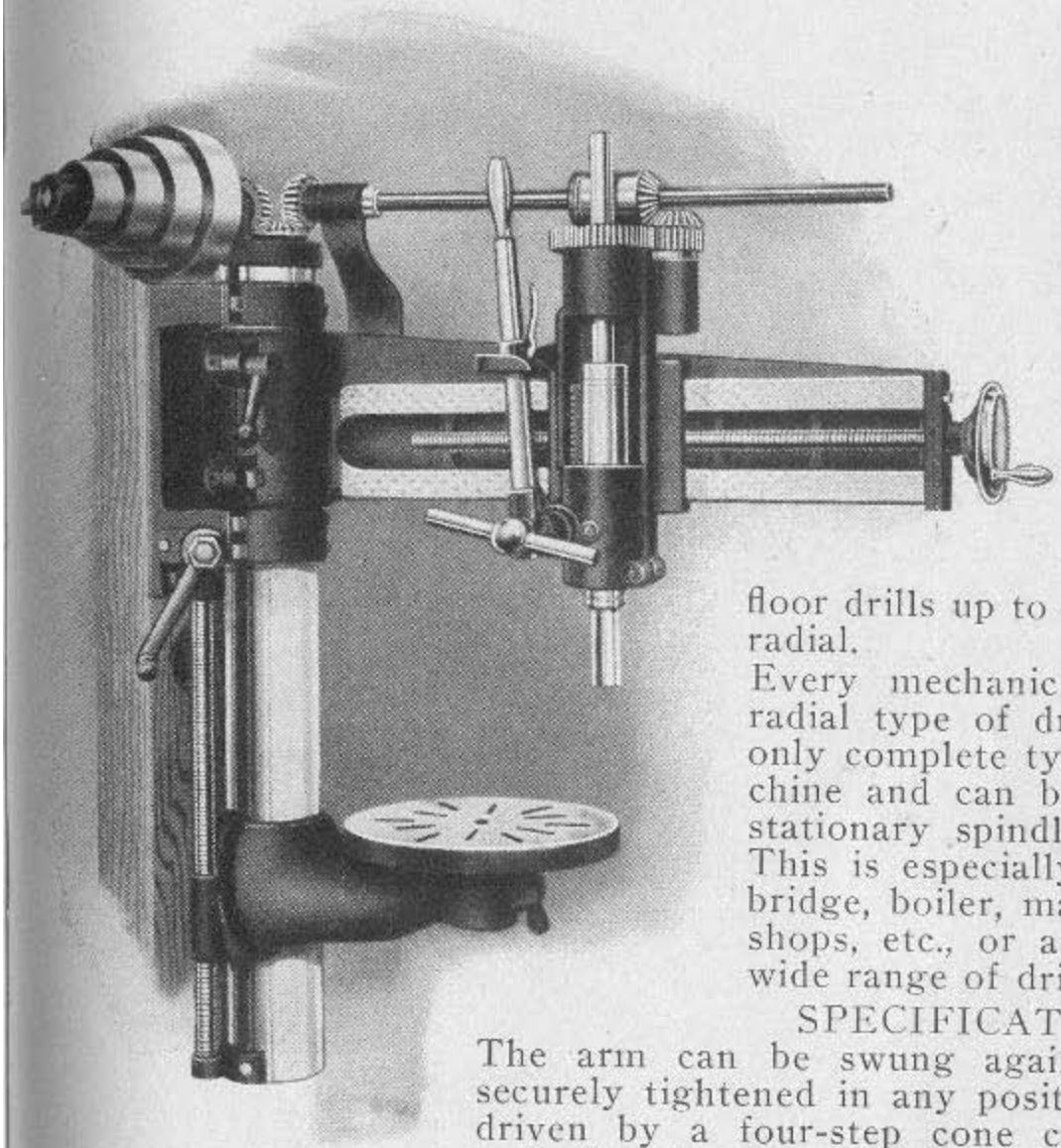
Height of drill, 70″.
Greatest distance between base and spindle, 39 inches.
Greatest distance between table and spindle, 26½″.
Travel of spindle, 9½″.
Diameter of spindle in sleeve, $1\frac{5}{16}$″.
Diameter of spindle below sleeve, 1¾″.
Spindle socket No. 3 Morse.
Drills to center of 21″ circle.
Diameter of table, 16″.
Diameter of column, 5⅝″.
Travel of table on column, 19 inches.
Size of cone pulleys, 8⅞″, 7¼″, 5⅝″, 4x2¼″ face.
Diameter of tight and loose pulleys, 8x2½″ face.
Speed of countershaft about 380 revolutions per minute.
Net weight, 670 pounds.

List Price $140.00

Safety Stop No. 30 Wall or Post Radial Drill

Chicago Heights
Illinois

Furnished with 2½-feet or 3½-feet Arm



This drill is an extremely accurate and powerful machine. It embodies many exclusive and valuable features and is particularly adapted for work in shops where, really needing a radial drill, the price has been prohibitive. It is several drills in one; all stationary floor drills up to 30 inch and 2½ ft. radial.

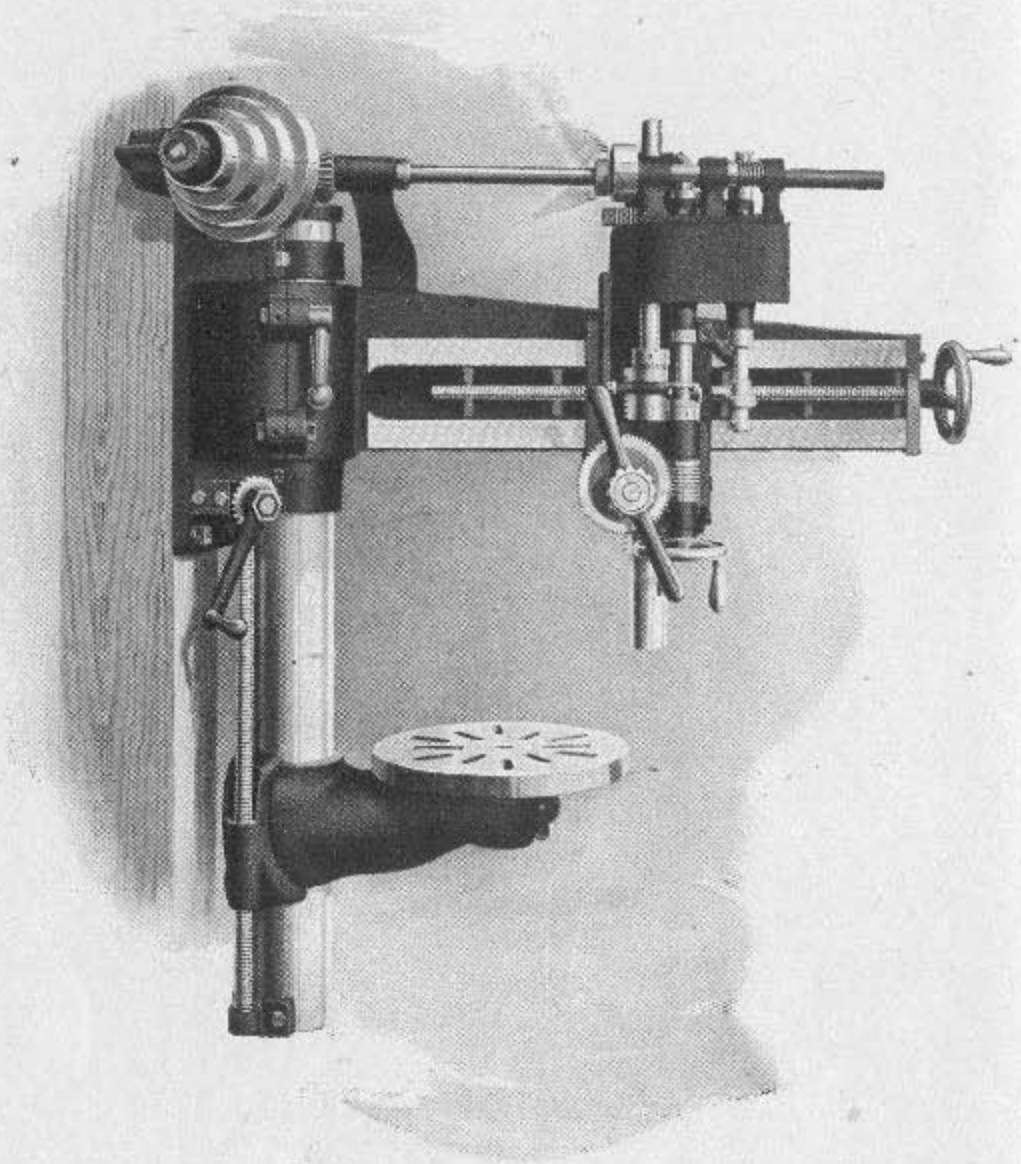
Every mechanic knows that the radial type of drill represents the only complete type of drilling machine and can be used where the stationary spindle type cannot. This is especially true in garages, bridge, boiler, machine, blacksmith shops, etc., or any place where a wide range of drilling is done.

SPECIFICATIONS

The arm can be swung against the wall and securely tightened in any position. This drill is driven by a four-step cone countershaft (with self-oiling bearings) which should be attached to the ceiling. The spindle head can be traversed along the arm by means of hand wheel screw, and can be firmly clamped in any position. The spindle has a quick return hand lever, in addition to the regular hand feed lever.

Height of drill, 56″.
Drills to center of circle outside of column, 64″ with 2½′ arm—84″ with 3½′ arm.
Greatest distance of center of spindle to column, 32″ with 2½′ arm—42″ with 3½′ arm.
Smallest distance of center of spindle to column, 7″.
Greatest distance of spindle to table, 18″.
Traverse of spindle up and down, 9″.
Diameter of spindle inside of sleeve, $1\frac{5}{16}$″.
Diameter of column, 5⅝″.
Size of cone pulleys, 8⅞″, 7¼″, 5⅝″, 4x2½″ face.
Diameter of tight and loose pulleys, 8″x2½″ face.
Speed of countershaft, about 380 R. P. M.
Net weight, 800 lbs.
Spindle, No. 3 Morse, will carry 1¼″ drill.

Equipped with all necessary gear guards (not illustrated). Four-step countershaft furnished as part of regular equipment. Post not furnished with drill.



No. 51 Self-Feed Radial Drill

Furnished with 2½-feet or 3½-feet Arm

Equipped with quick return lever, serving as pilot wheel to move spindle. Four changes of feed conveniently arranged for instantaneous change. Automatic cut off. For general description of drill, see page 131. Net weight 860 pounds.

List Price, 2½-feet Arm.....$300.00
List Price, 3½-feet Arm..... 325.00

Canedy-Otto Grinder No. 4

An ideal and very economical Grinder and Polisher for machine shops, foundries, blacksmith shops, garage shops, etc. For large work as well as for small work.

Furnished with rests for heavy work and can readily be adjusted for side or face of wheel.

Carries wheels up to 20x3 inches or smaller with 1¼-inch hole.

Especially long spindles and bearings.

Bearings have exceptionally large space for the operator and for grinding large irregular shaped castings.

Capacity 20x3 inches; wheel with 1¼-inch hole; arbor to floor 30 inches; length of arbor 42½ inches; diameter of arbor 1¼ inches; size of pulleys 5 inches by 6 inches. Weight 255 pounds.

List Price $25.00

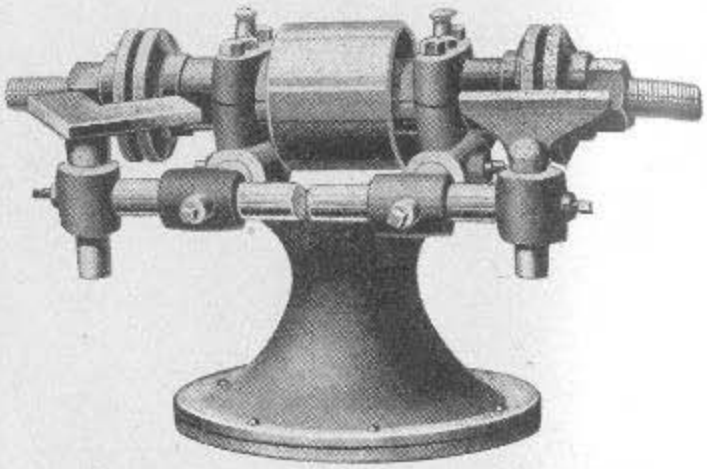
No. 4 Countershaft for above; 16-inch drive pulley; 6-inch tight and loose pulleys; weight 85 pounds.

List Price $14.00

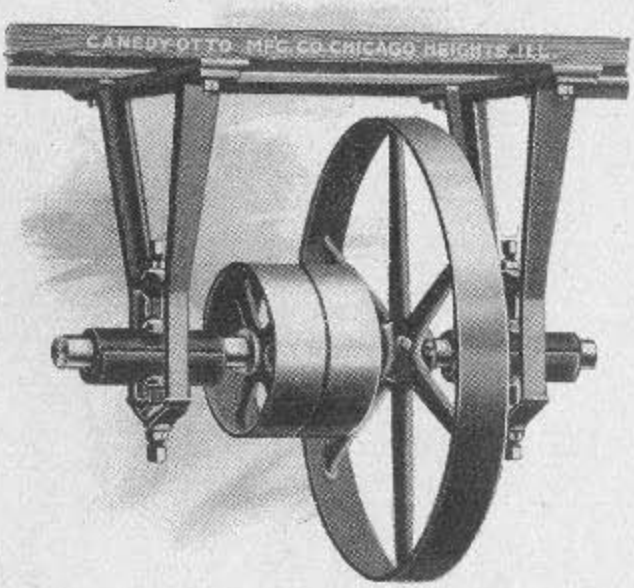
Machines will be furnished with or without rests and countershafts. Please specify which way to ship.

Canedy-Otto Grinders

These are exceptionally capable machines with nothing cheap about them except the price. They are in every respect highly machined and well finished Grinder Heads and are fitted for either column or bench use. Bearings are large with genuine Babbitt, generously supplied with oil cups and rest in knuckles jointed to the collars. Supplied with or without base and can be had in either of the following sizes:



Number	Size Wheels will take (2 Wheels)	Size Arbor Inches	Size Pulley Inches	Weight Pounds	Price
1	8x1½	¾	2½x2	20	$10.00
2	10x2	1	4 x2½	40	15.00
3	14x2½	1¼	5 x4	75	20.00



Grinder Countershafts

Number	Shaft Inches	Pulleys		Price Each
		Tight and Loose, In.	Drive, Inches	
1	1	5x2½	10x2½	$ 8.00
2	1⅛	6x3	12x3	10.50
3	1¼	6x4½	16x4	11.50

Columns Only for Bench Grinders

For use with Bench Grinders Only

Number	Height Inches	Weight Pounds	Price, Each
1	32	55	$ 7.50
2	32	70	11.00
3	32	90	15.00

Illustrations of

REPAIRS

With Prices and Descriptions

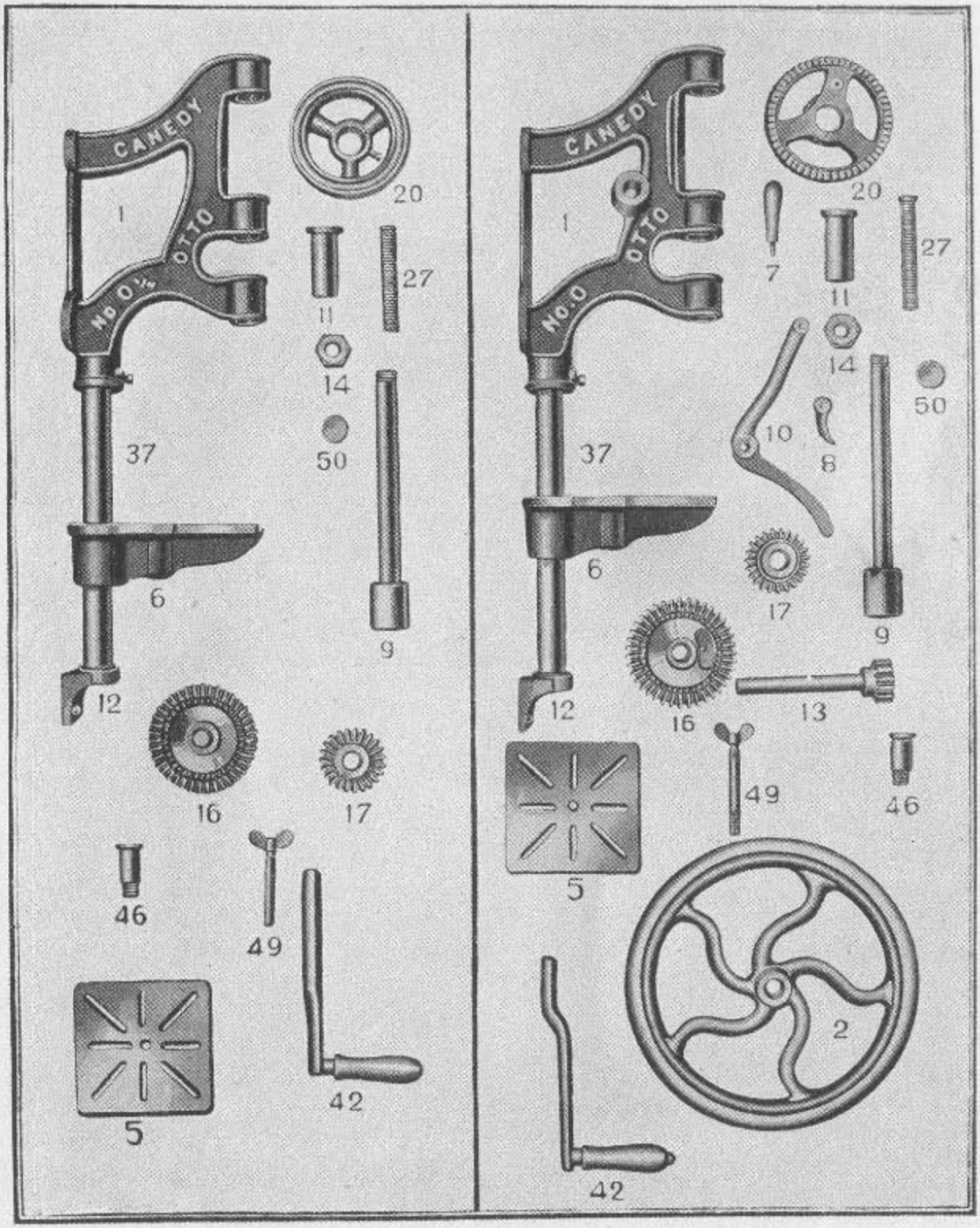
for

Forges, Blowers and Drills

will be found on the following pages

See back of each illustration for Number, Description and Price

Western Chief Drills Nos. 0½ and 0



Repair List of Drill No. 0½

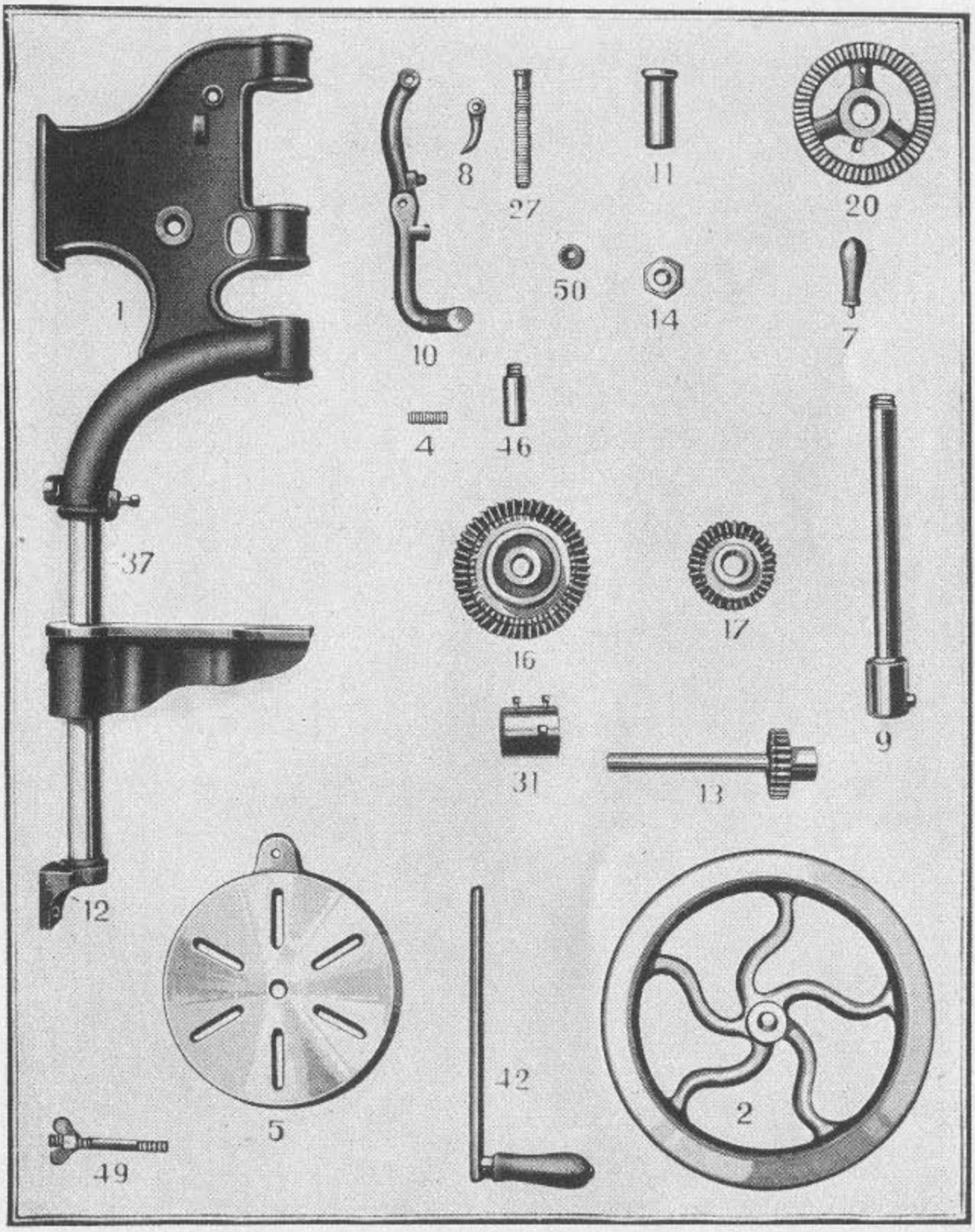
When ordering, give Number of Drill and Number of Part wanted

No.	Name of Part	Price
1	Frame	$ 2.50
5	Table	.50
6	Table Rest	.75
9	Mandrel	1.80
11	Feed Nut	.60
12	Foot	.30
14	Hexagon Nut	.30
16	Large Crank Gear	1.00
17	Small Bevel Gear	.50
20	Feed Wheel	.75
27	Feed Screw	.50
37	Table Rest Shaft	1.25
42	Crank	.50
46	Stud for No. 16 Gear	.40
49	Screw and Nut for Table	.10
50	Fiber Washer	.05

Repair List of Drill No. 0

1	Frame	$ 2.50
2	Fly-wheel	1.50
5	Table	.50
6	Table Rest	.75
7	Feed Wheel Handle	.10
8	Feed Arm Dog	.10
9	Mandrel	1.80
10	Feed Arm	.70
11	Feed Nut	.60
12	Foot	.30
13	Small Gear and Fly-wheel Shaft	.80
14	Hexagon Nut	.30
16	Large Crank Gear	1.25
17	Small Bevel Gear	.50
20	Feed Wheel	.75
27	Feed Screw	.50
37	Table Rest Shaft	1.25
42	Crank	.50
46	Stud for No. 16 Gear	.40
49	Screw and Nut for Table	.10
50	Fiber Washer	.05

Western Chief Drill No. 00

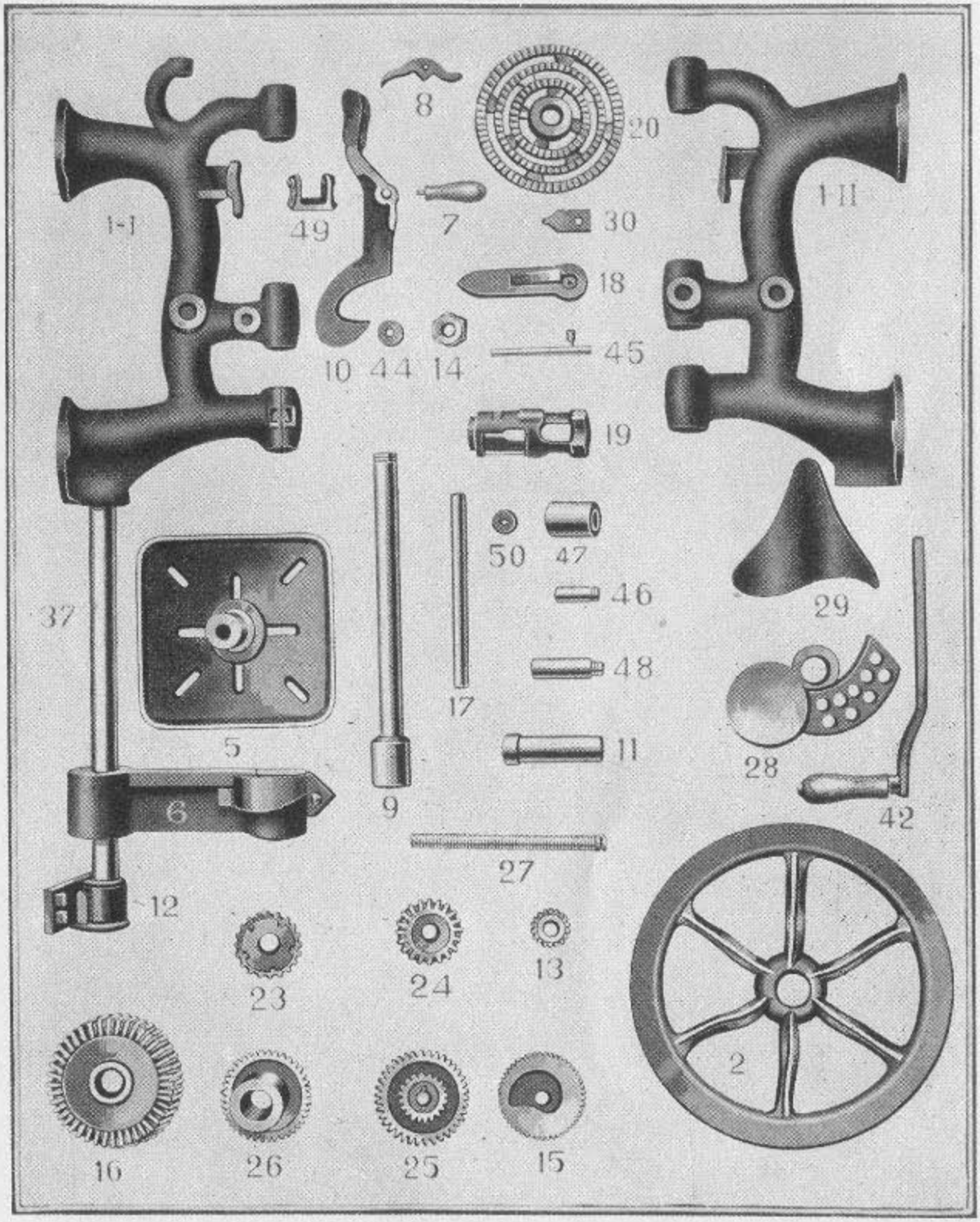


Repair List of Drill No. 00

When ordering, give Number of Drill and Number of Part wanted

No.	Name of Part	Price
1	Frame	$ 3.00
2	Fly-wheel	1.50
4	Feed Arm Spring	.10
5	Table	1.60
6	Table Rest	1.00
7	Feed Wheel Handle	.10
8	Feed Arm Dog	.10
9	Mandrel (state if ½ or $\frac{11}{64}$ inch)	1.80
10	Feed Arm	.75
11	Feed Nut	.60
12	Foot	.30
13	Small Gear and Fly-wheel Shaft	.80
14	Hexagon Nut	.30
16	Large Bevel Gear	1.50
17	Small Bevel Gear	.50
20	Feed Wheel	.75
27	Feed Screw	.50
31	Crank Hub	.80
42	Crank	.50
46	Stud for No. 16 Gear	.40
49	Screw and Nut for Table	.10
50	Fiber Washer	.05

Western Chief Drills Nos. 1 and 2

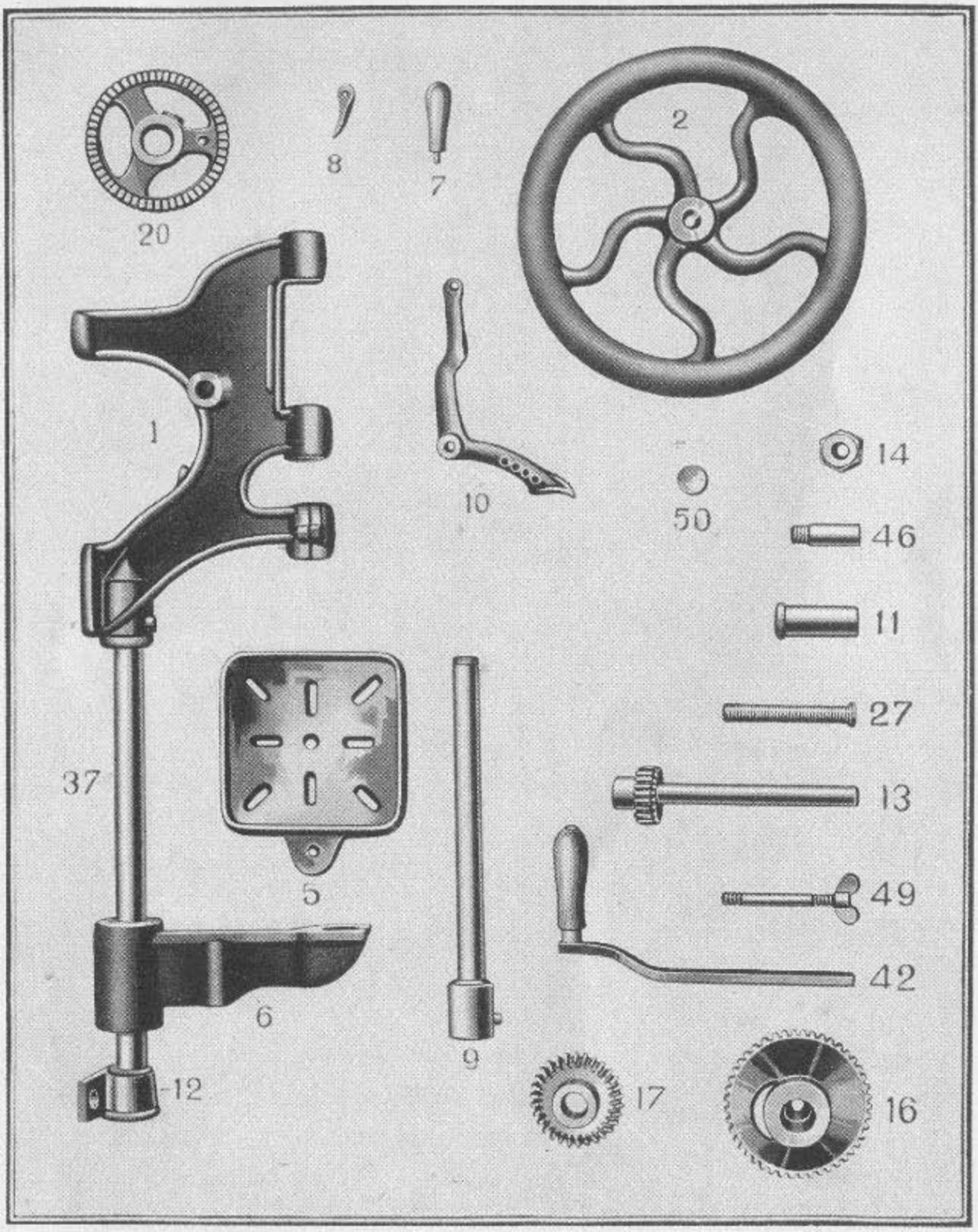


Repair List of Western Chief Drills Nos. 1 and 2

When ordering, give Number of Drill and Number of Part wanted

No.	Name of Part	Price
I—1	Frame (No. 1 Drill)	$ 6.00
II—1	Frame (No. 2 Drill)	6.00
2	Fly-wheel	2.00
5	Table	2.50
6	Table Rest	1.25
7	Feed Wheel Handle	.20
8	Feed Rod Dog	.10
9	Mandrel (bored ½ or $\frac{41}{64}$ inch), old style, not ball-bearing	1.80
9	Mandrel, ball-bearing and with Safety Chuck, ½ or $\frac{41}{64}$	3.80
10	Feed Arm	.75
11	Feed Nut	.80
12	Foot	.40
13	Small Feed Gear	.30
14	Brass Nut	.50
15	Large Feed Gear	.80
16	Large Bevel Gear	1.75
17	Fly-wheel Shaft	.50
18	Arm Stop	.30
19	Return Yoke	.75
20	Feed Wheel	1.00
23	Top Gear (Bevel)	.50
24	Bottom Gear (Bevel)	.50
25	Double Gear	1.00
26	Crank Gear	1.25
27	Feed Screw (state if for ball-bearing or not)	.50
28	Drill Holder (No. 2 Drill)	.50
29	Shield (No. 2 Drill)	.30
30	Feed Screw Stop (No. 2 Drill)	.10
37	Table Rest Shaft	1.50
42	Crank	.50
44	Feed Arm Roller	.20
45	Return Trip	.20
46	Stud for No. 15 Feed Gear	.30
47	Sleeve for No. 26 Crank Gear	.60
48	Stud for Sleeve No. 47	.40
49	Loop for Feed Arm	.20
50	Fiber Washer	.05

Western Chief Drill No. 3

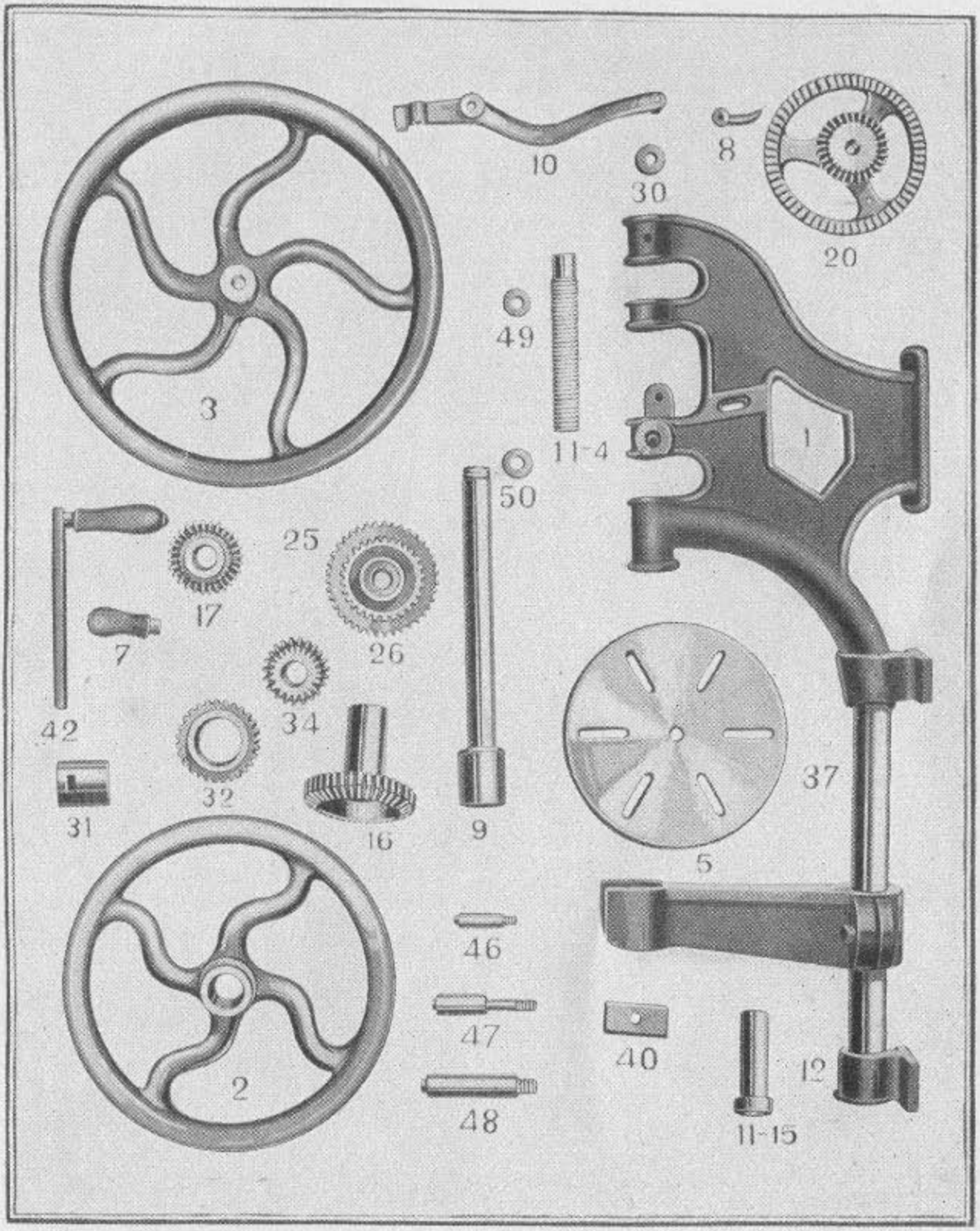


Repair List of Western Chief Drill No. 3

When ordering, give Number of Drill and Number of Part wanted

No.	Name of Part	Price
1	Frame	$ 3.00
2	Fly-wheel	1.50
5	Table	1.60
6	Table Rest	1.00
7	Feed Wheel Handle	.20
8	Feed Arm Dog	.10
9	Mandrel (bored ½ or $\frac{41}{64}$ inch), old style, not ball-bearing	1.80
9	Mandrel, ball-bearing and with Safety Chuck, ½ or $\frac{41}{64}$	3.80
10	Feed Arm	.80
11	Feed Nut	.60
12	Foot	.30
13	Small Gear and Fly-wheel Shaft	.80
14	Brass Nut	.50
16	Large Bevel Gear	1.50
17	Small Bevel Gear	.50
20	Feed Wheel	.75
27	Feed Screw (say if for ball-bearing or not)	.50
37	Table Rest Shaft	1.25
42	Crank	.50
46	Stud for No. 16 Bevel Gear	.40
49	Screw and Nut for Table	.10
50	Fiber Washer	.05

Western Chief Drills Nos. 4 and 15



A large portion of the above are interchangeable in our Nos. 4 and 15 Drills. See next page

Repair List of Western Chief Drills Nos. 4 and 15

When ordering, give Number of Drill and Number of Part wanted

No. 4 Drill

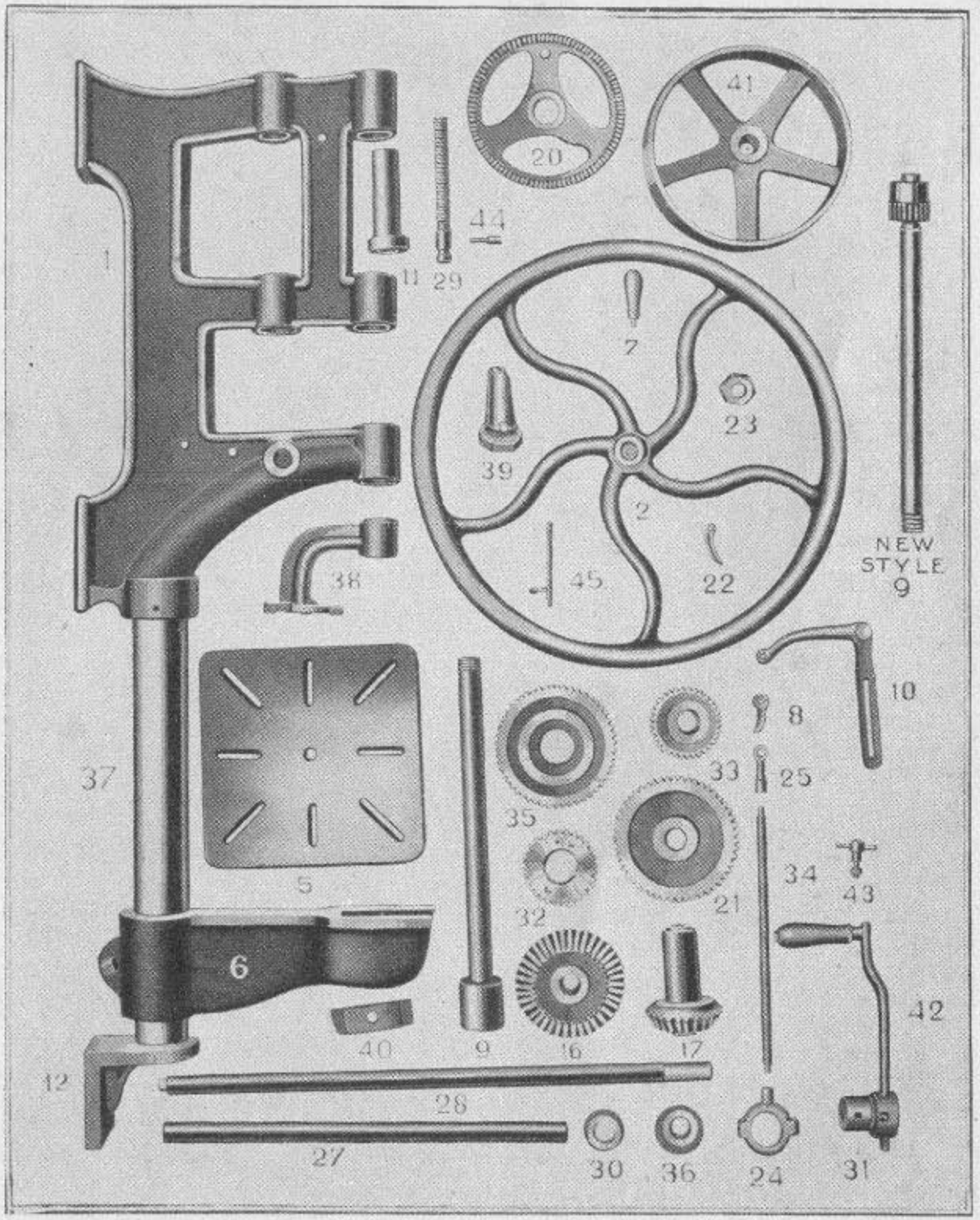
No.	Name of Part	Price
1	Frame	$ 6.50
2	Fly-wheel (with Gear)	2.00
3	Fly-wheel (Top)	2.25
5	Table	2.50
6	Table Rest	1.40
8	Feed Arm Dog	.10
9	Mandrel (bored ½ or 41/64 inch)	2.10
10	Feed Arm	.75
11–4	Feed Nut	1.25
12	Foot	.40
16	Large Bevel Gear	1.75
17	Small Bevel Gear	.50
20	Feed Wheel	1.25
25	Small Gear { To Make	2.25
26	Large Gear { Double Gear }	
30	Iron Washer	.05
31	Crank Hub	.60
32	Flat Gear	.75
34	Eccentric Bevel Gear	.80
37	Table Rest Shaft	1.80
40	Table Clamp	.10
42	Crank	.50
46	Stud for No. 20 Feed Wheel	.30
47	Stud for Double Gears Nos. 25 and 26	.50
48	Stud for No. 16 Large Bevel Gear	.60
49	Fiber Washer, top of Feed Nut	.05
50	Fiber Washer, bottom of Feed Nut	.05

No. 15 Drill

Many of the No. 4 Drill Repairs will fit No. 15 Drill. Those listed below are EXCLUSIVELY for No. 15 Drill, and therefore care should be observed in ordering to be sure to state whether wanted for old No. 4 Drill or the new improved No. 15 Drill. Parts NOT mentioned below are same as for No. 4, and will be found under No. 4 list above.

No.	Name of Part	Price
1	Frame	$ 6.50
3	Fly-wheel, Pulley Side	2.25
9	Mandrel (bored ½ or 41/64 inch), old style, not ball-bearing	2.10
9	Mandrel, ball-bearing and with Safety Chuck, ½ or 41/64	4.10
10	Feed Arm	.75
11–15	Feed Nut	1.25
16	Large Bevel Gear (cut)	2.50
20	Feed Wheel	1.25
25	Small Gear (cut) { To Make	3.00
26	Large Gear (cut) { Double Gear }	
29	Feed Screw (not illustrated), say if for ball-bearing or not	1.00
31	Crank Hub	.60
32	Flat Gear (cut)	1.25
—	Shaft for Double Gear and Fly-wheel	1.00

Western Chief Drills Nos. 7 and 12

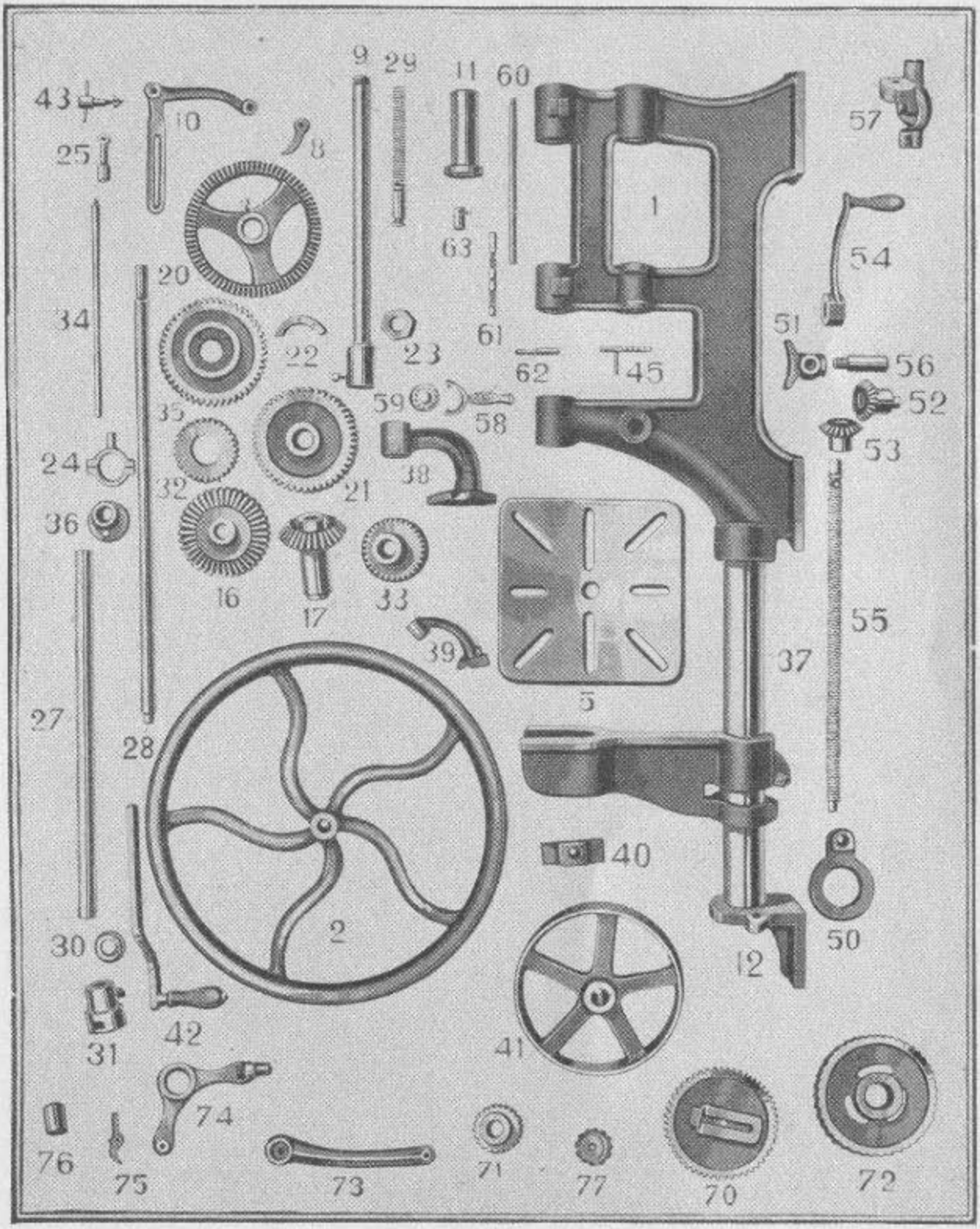


Repair List of Western Chief Drills Nos. 7 and 12

When ordering, give Name of Part Wanted and state PARTICULARLY whether for No. 7 or No. 12 Drill

No.	Name of Part	Price
1	Frame	$ 8.00
2	Fly-wheel	2.25
5	Table	3.00
6	Table Rest	2.00
7	Feed Wheel Handle	.15
8	Feed Arm Dog	.10
9	Mandrel (bored ½ or 41/64 inch), old style, not ball-bearing	2.50
9	Mandrel, ball-bearing and with Safety Chuck, ½ or 41/64	4.50
10	Feed Arm	.60
11	Feed Nut	.90
12	Foot	.50
16	Large Bevel Gear	2.50
17	Small Bevel Gear	2.00
20	Feed Wheel	.60
21	Large Gear with Hub	2.25
22	Latch, to change Gear	.50
23	Brass Nut	.50
24	Brass Eccentric Strap	.65
25	Brass Pitman Head	.50
27	Pulley and Crank Shaft	.90
28	Fly-wheel and Gear Shaft	1.00
29	Feed Screw (say if ball-bearing or not)	1.00
30	Washer, cast for Pulley Shaft	.20
31	Crank Hub	1.50
32	Small Flat Gear (always furnished with No. 35 Gear)	1.40
33	Small Hub Gear	1.50
34	Pitman Rod	.20
35	Large Straight Gear (always furnished with No. 32 Gear)	2.00
36	Eccentric	.60
37	Table Rest Shaft	2.25
38	Large Bracket	.60
39	Small Bracket	.50
40	Table Clamp	.20
41	Pulley for Power	2.00
42	Crank	.50
43	Eccentric Bolt	.30
44	Screw, for Feed Screw	.10

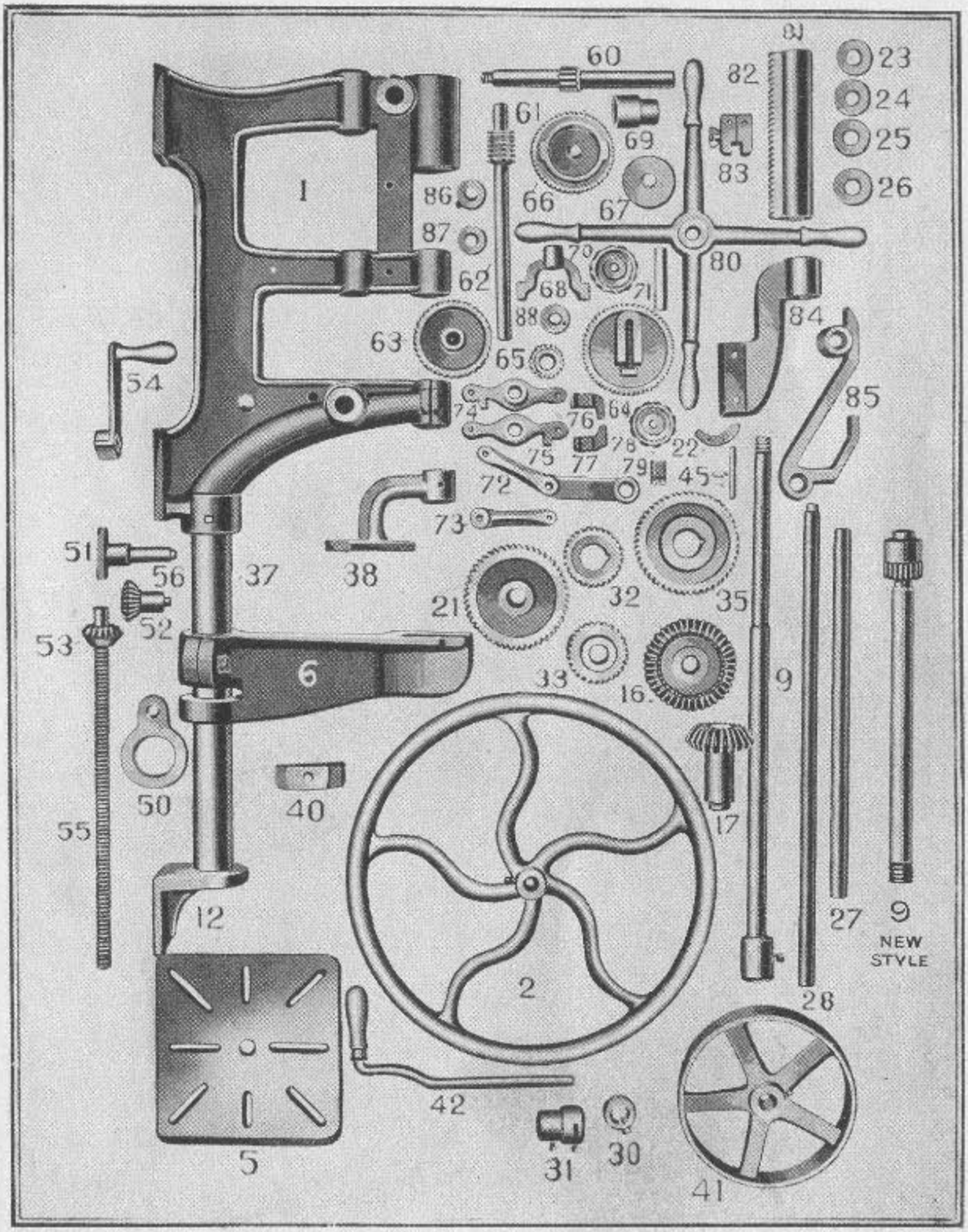
Western Chief Drill No. 14



Repair List of Western Chief Drill No. 14

No.	Name of Part	Price
1	Frame	$ 8.50
2	Fly-wheel	2.25
5	Table	3.00
6	Table Rest	2.00
8	Feed Arm Dog	.10
9	Mandrel (bored ½ or 41/64 inch), old style, not ball-bearing	2.50
9	Mandrel, ball-bearing and with Safety Chuck, ½ or 41/64	4.50
10	Feed Arm	.60
11	Feed Nut	.90
12	Foot	.50
16	Large Bevel Gear	2.50
17	Small Bevel Gear	2.00
20	Feed Wheel	.60
21	Large Gear with Hub	2.25
22	Latch, to change Gear	.50
23	Brass Nut	.50
24	Brass Eccentric Strap	.65
25	Brass Pitman Head	.50
27	Pulley and Crank Shaft	.90
28	Fly-wheel and Gear Shaft	1.00
29	Feed Screw (say if ball-bearing or not)	1.00
30	Washer, cast for Pulley Shaft	.20
31	Crank Hub	1.50
32	Small Flat Gear (always furnished with No. 35 Gear)	1.40
33	Small Hub Gear	1.50
34	Pitman Rod	.20
35	Large Straight Gear (always furnished with No. 32 Gear)	2.00
36	Eccentric	.60
37	Table Rest Shaft	2.25
38	Large Bracket	.60
39	Small Bracket	.50
40	Table Clamp	.20
41	Pulley for Power	2.00
42	Crank	.50
43	Eccentric Bolt	.30
45	Trip for Gear Latch	.20
50	Table Rest Screw Nut	.70
51	Screw Bearing	.40
52	Raise and Lower Crank Pinion	.50
53	Raise and Lower Top Pinion	.50
54	Raise and Lower Crank	.60
55	Raise and Lower Screw	1.00
56	Stud	.25
57	Feed Yoke	1.00
58	Return Lever	.90
59	Return Lever Collar	.80
60	Stop Shaft	.20
61	Feed Yoke Plunger	.40
62	Catch with Spring to No. 61 Plunger	.20
63	Upper and Lower Stops	.30
70	Large Feed Gear (New Style)	.60
71	Small Feed Gear (New Style)	.30
72	Ratchet Feed Gear (New Style)	.70
73	Long Feed Arm (New Style)	.60
74	Cross Feed Arm (New Style)	.40
75	Feed Dog (New Style)	.10
76	Bushing for No. 73 Feed Arm (New Style)	.30
77	Lock Nut for No. 73 Feed Arm (New Style)	.10

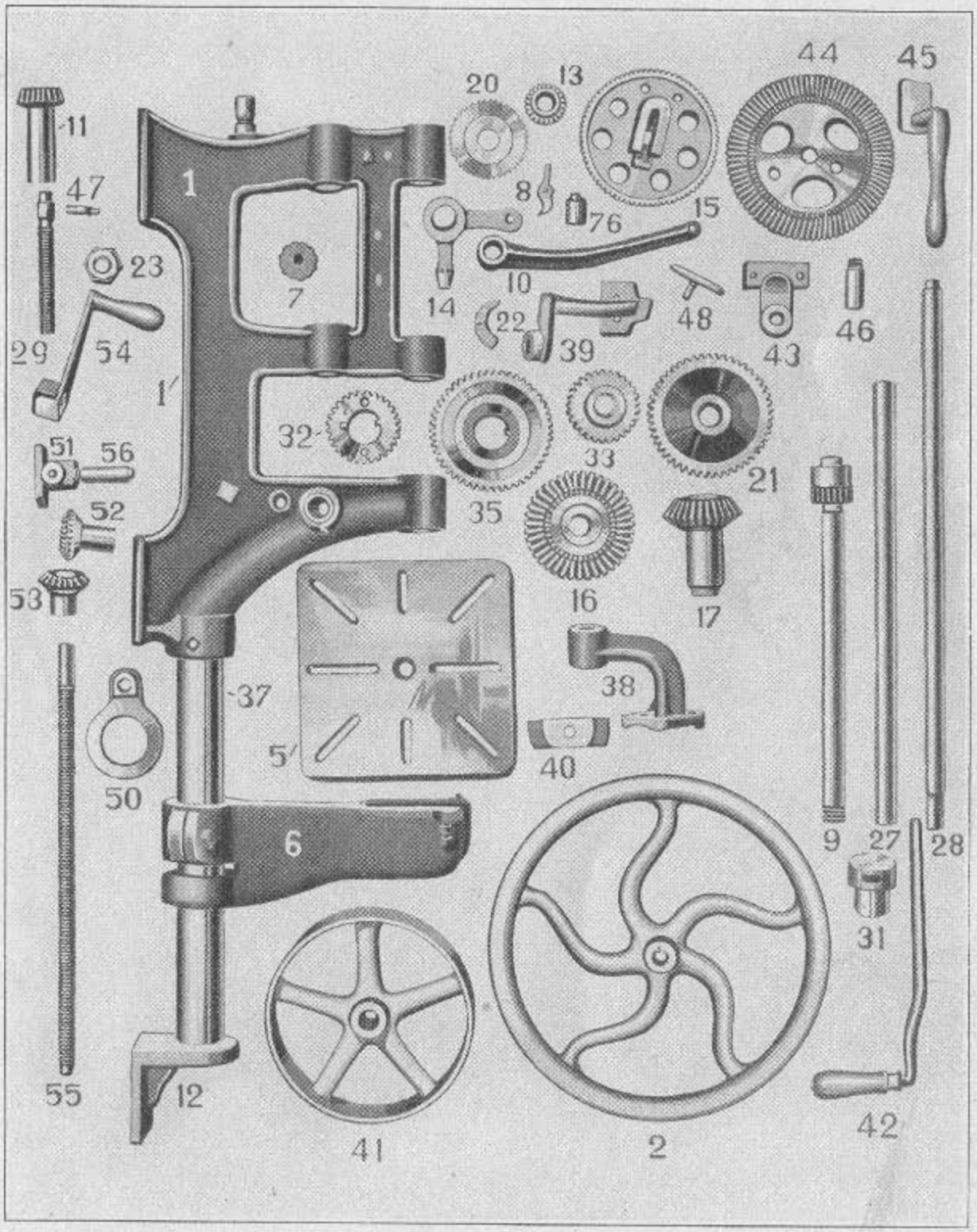
Western Chief Drills Nos. 16 and 17



Repair List of Drills Nos. 16 and 17

No.	Name of Part	Price
1	Frame	$10.00
2	Fly-wheel	2.50
5	Table	3.00
6	Table Rest	2.50
9	Mandrel with Safety Chuck, bored ½ or 41/64 inch; state if for single ball-bearing or train of balls	5.00
12	Foot	.50
16	Large Bevel Gear	2.50
17	Small Bevel Gear	2.00
21	Large Gear with Hub	2.25
22	Latch to Change Gear	.50
23	Upper Lock-nut for Mandrel	.40
24	Upper Adjusting Nut for Mandrel	.40
25	Ball-bearing Washer	.20
26	Ball Retainer (Brass)	.40
27	Pulley and Crank Shaft	.90
28	Fly-wheel and Gear Shaft	1.00
30	Collar and Pulley Shaft	.20
31	Crank Hub	1.50
32	Small Flat Gear (furnished with No. 35 Gear)	1.40
33	Small Hub Gear	1.50
35	Large Straight Gear (furnished with No. 32 Gear)	2.00
37	Table Rest Shaft	2.25
38	Large Bracket	.60
40	Table Clamp	.20
41	Pulley for Power	2.00
42	Crank	.50
45	Trip for Gear Latch	.20
50	Table Rest Screw Nut	.70
51	Screw Bearing (51, 52 and 56 always assembled)	.40
52	Raise and Lower Crank Pinion	.50
53	Raise and Lower Top Pinion	.50
54	Raise and Lower Crank	.60
55	Raise and Lower Screw	1.00
56	Stud	.25
60	Lever and Feed Gear Shaft, with Gear	1.50
61	Worm Feed Gear	.80
62	Worm Feed Gear Shaft	.50
63	Ratchet Feed Gear	.60
64	Large Feed Gear	.60
65	Small Feed Gear	.30
66	Large Spiral Feed Gear	1.00
67	Clutch Hub for Spiral Feed Gear	.30
68	Clutch Bracket	.30
69	Sleeve for No. 60 Shaft	.30
70	Clutch Hand Wheel	.25
71	Large Feed Gear Shaft	.25
72	Long Feed Arm	.60
73	Short Feed Arm	.30
74	Upper Cross Feed Arm	.30
75	Lower Cross Feed Arm	.30
76	Upper Feed Dog	.10
77	Lower Feed Dog	.10
78	Hand Wheel, Lock-nut for Feed Arm	.20
79	Bushing for Long Feed Arm	.30
80	Hand, Feed Lever	1.50
81	Feed Sleeve	1.50
82	Feed Sleeve Rack	.60
83	Brass Clamp for Feed Sleeve Rack	.80
84	Upper Bracket for Feed Bearing	1.00
85	Lower Bracket for Feed Bearing	1.00
86	Collar for Feed Gear Shaft	.20
87	Fiber Washer for Feed Gear Shaft	.10
88	Clutch Screw, Bearing	.15
—	Iron Column and Base, No. 17 Drill	15.70

Western Chief Drill No. 18

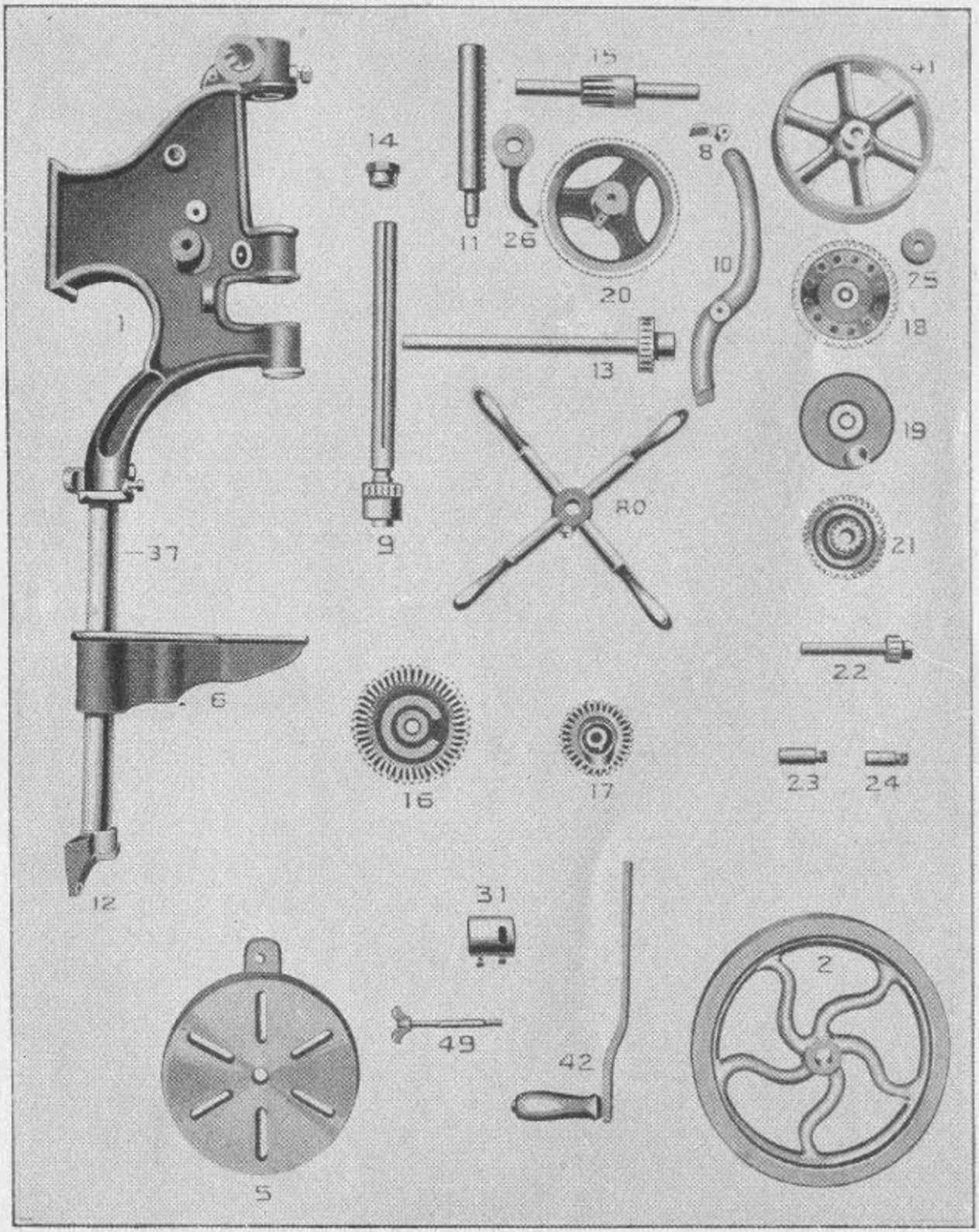


Repair List of Western Chief Drill No. 18

When ordering, give Number of Drill and Number of Part wanted

No.	Name of Part	Price
1	Frame	$ 8.50
2	Fly-wheel	2.25
5	Table	3.00
6	Table Rest	2.00
7	Lock-nut for No. 10 Feed Arm	.30
8	Feed Dog	.10
9	Mandrel (bored ½ or 41/64 inch) Safety Chuck	4.50
10	Long Feed Arm	.60
11	Feed Nut and Pinion	1.00
12	Foot	.50
13	Small Feed Gear	.30
14	Cross Feed Arm	.40
15	Large Feed Gear	.60
16	Large Bevel Gear	2.50
17	Small Bevel Gear	2.00
20	Ratchet Feed Gear	.60
21	Large Gear, with Hub	2.25
22	Latch to Change Gears	.50
23	Brass Nut	.50
27	Pulley and Crank Shaft	.90
28	Fly-wheel and Gear Shaft	1.00
29	Feed Screw	1.00
30	Collar for Pulley Shaft (not shown)	.20
31	Crank Hub	1.50
32	Small Flat Gear (always sent with No. 35 Gear)	1.40
33	Small Hub Gear	1.50
35	Large Flat Gear (always sent with No. 32 Gear)	2.00
37	Table Rest Shaft	2.25
38	Large Bracket	.60
39	Small Bracket (for No. 14 Cross Feed Arm)	.50
40	Table Clamp	.20
41	Pulley for Power	2.00
42	Crank	.50
43	Feed Gear Bracket	.50
44	Lever Feed Gear	1.00
45	Feed Gear Lever	.50
46	Stud for Lever Feed Gear	.40
47	Feed Screw Stop	.40
48	Trip for Gear Latch	.20
50	Table Rest Screw Nut	.70
51	Screw Bearing	.40
52	Raise and Lower Crank Pinion	.50
53	Raise and Lower Top Pinion	.50
54	Raise and Lower Crank	.60
55	Raise and Lower Screw	1.00
56	Stud for No. 51 Gear	.25
76	Bushing for No. 10 Feed Arm	.30

Western Chief Drill No. 19



Repair List of Drill No. 19

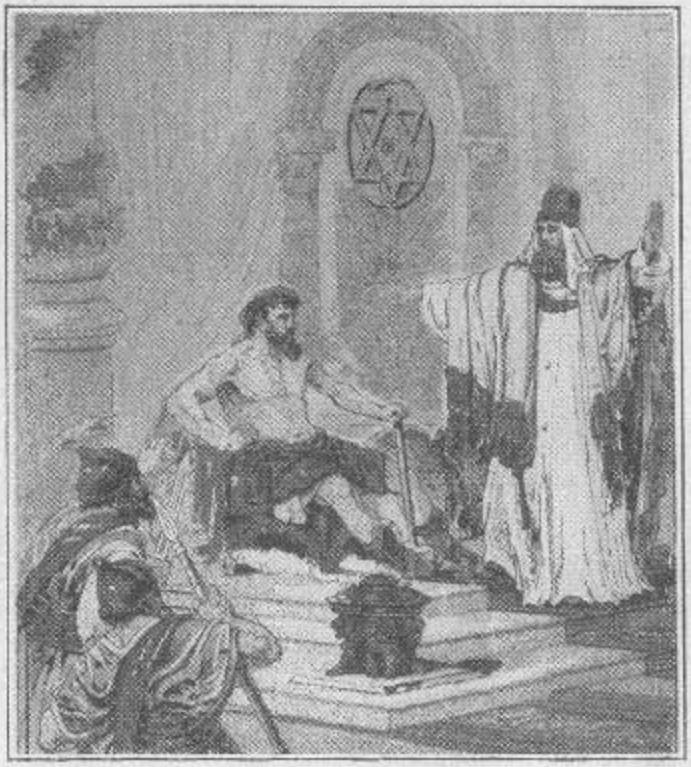
When ordering, give Number of Drill and Number of Part wanted

No.	Name of Part	Price
1	Frame	$ 3.50
2	Fly-wheel	.50
5	Table	1.60
6	Table Rest	1.25
8	Dog for Feed Arm	.10
9	Mandrel with Safety Chuck (state if ½ or $\frac{1}{64}$ inch)	3.80
10	Feed Arm	.90
11	Feed Rack	2.00
12	Foot	.30
13	Fly-wheel Shaft and Pinion	.80
14	Brass Nut	.50
15	Rack Pinion and Shaft	2.00
16	Large Bevel Gear	1.50
17	Small Bevel Gear	.50
18	Lock Gear	1.50
19	Plate and Plunger for Lock Gear	1.25
20	Feed Wheel	.75
21	Double Gear	1.00
22	Shaft and Pinion for Feed Wheel	.80
23	Stud for Large Bevel Gear	.30
24	Stud for Double Gear	.30
25	Collar for Pulleys	.20
26	Large Dog for Feed Wheel	.30
31	Crank Hub	.60
37	Table Rest Shaft	1.25
41	Pulley	1.50
42	Crank	.50
49	Screw and Nut for Table	.10
80	Hand Feed Lever	1.25

The Smith

MFG. COMPANY
Chicago Heights
Illinois

THE SOVEREIGN OF ALL ARTISANS



In the year B. C. 1005, Solomon, King of Israel, spake unto his servants and saith, "Now that the Temple is finished, let us declare praise unto him who deserveth praise," and he bade them each speak of the works he hath done.

And Hiram of Tyre, a worker in brass, spoke of the images he had wrought for the mighty Temple by his talent, aided by the tools of steel that were made by the Smith. And Abinadab, a carver of cedar and kindred woods, declared aloud his praise of the Ironsmith, who created the tools for his handiwork.

And Geber, a hewer of stone, and Baana, who wrought wonders in iron, and each of the mighty throng of builders who gathered around the wise King, all admitted that without the Smith who made their tools whereby they carved the precious stones, hewed the marble slabs, and wrought in hammered brass and gold the cherub images for the lordly temple, they would have been helpless and without power.

Then spoke King Solomon, "Bring forth the Smith! Command him into my presence, that he may hear of all this." And straightway cometh from among the artisans a bearded Vulcan of the forge, brawny in face and arms, and with sinews of iron, much amazed with wonder at his presence before the high King of Israel.

"Didst thou, humble worker of iron, create within thy grizzled brain, and didst thou shape with thy cunning hands, the tools of Hiram, of Abinadab, of Geber, that they might please me with their handiwork? Didst thou fashion the chisel of steel that chipped the marble pillars of the great palace? And didst thou forge from flaming iron those tools so cunningly devised, that the worker might carve the cedar of Lebanon?

"Yea, verily, most gracious King, hath I done all this, but all for praise of thee, and of thy Temple."

"Fear not, I beseech thee, though thou art but an humble Smith. To thee belongs the honor, to thee belongs the praise, and to thee a seat within the temple and upon the throne, for thou hast fashioned by the cunning of thy brain and strength of arm the tools of all those who did build my temple, and I will create thee greater than all these, for thou art the foundation of all." And thereupon the King declared throughout all Israel "that iron was king" and the humble Smith "the Sovereign of all Artisans."