



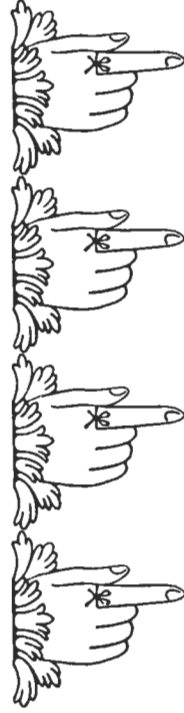
JOHN THOMSON
PRESS COMPANY

NEW YORK CITY

COLLIS ARMOUR &
PLATEN PRESS

FOR

PRINTING, EMBOSSEING,
STAMPING, CUTTING
AND SCORING

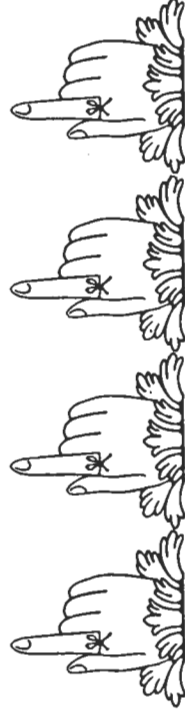


New England Agent

American Type Founders Company

270 Congress St.
Boston

We quote manufacturers' prices
and terms, and invite
correspondence



Set in Strathmore, with Bulfinch Attractors No. 16, 25c. each



Factory—Trade Marks—Patents

ON the First of May, 1902, we purchased from the Colt's Patent Fire Arms Manufacturing Company, of Hartford, Connecticut, the entire press plant which prior thereto had been used by it in the manufacture, first, of the "Universal," and, later, of our presses, popularly known by the trade name of "Colt's Armory"; which name, by the way, as also the figure of a *Colt*, rampant, is registered and owned by us. The plant was moved from its old location in the "East Armory" to leased space in the "West Armory," where we operated it until April 16, 1906, when we "pulled stakes" and moved up to our new factory; which is believed to be the most highly modernized works, for the purpose, in existence. Our superintendent and principal mechanics are the same who, for years, were in responsible charge of construction when the Colt Company served us as contractors. Meantime, important improvements have been made, for which over twenty patents have been granted, and many thousands of dollars' worth of new machinery, special tools and patterns have been put into use. The result, in a word, has been a product of even greater value and satisfaction to the purchaser than had previously been turned out. Printers are invited to visit our works where they will see that what we preach as to quality in the machinery we build and sell, we ourselves practice in the machinery we use. And the objective, in both cases, is the same: the best and largest output at the lowest cost of production and maintenance.

June 1906

John Thomson Press Company

Nott and East Avenues

Long Island City, New York

JOHN THOMSON, President

W. G. ZICK, Vice-president

WILLIAM THOMSON, Secretary and Treasurer

C. B. MELLEN, Superintendent

PLEASE OBSERVE: This catalogue comprises Three Divisions: Printing Presses (this page), Paper-Box Cutting and Scoring Presses (page 41), and Embossing Presses (page 65).

Printing Press Division

Sizes and Styles The Quarto Medium is built in the Style One and Style Two constructions. The Style One is provided with two form rollers and the Style Two with three form rollers.

The Half Medium and the Half Super Royal are now built in the Style Two-A, Style Five-A and Style Six-A constructions.

Adaptations The Quarto Medium Style One is particularly a *high-speed* press. It can be operated quite as rapidly as the "disk" type of machine; can be made ready more quickly; has far more effective distribution, and will produce better results.

The Quarto Medium Style Two is better adapted, through its greater distribution, for half-tone and color printing.

The Half Medium and the Half Super Royal in the Style Two-A construction are equal to the average requirements of high-class printers. They are *high-speed* presses.

The Half Medium and the Half Super Royal in the Style Five-A construction are much stronger machines than the Style Two. They are adapted for all that the Style Two is capable of doing and also for a much heavier range of work, especially in the way of half-tone, chromotype and tint printing. They, also, are *high-speed* presses.

The Half Medium and the Half Super Royal in the Style Six-A construction are modifications of the Style Five, adapting them for nearly all that can be done on the Styles Two and Five and also for certain classes of embossing, book-cover stamping and the like, hot or cold.

General Description Applicable to all Sizes and Styles of Our Printing Presses

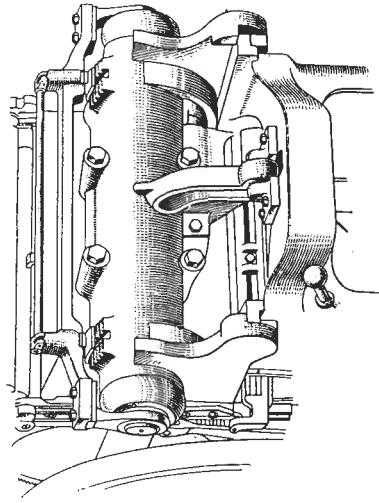
The Frame and Bed are cast in one part, without jointed members. The bed is chambered, to save iron; but, for the duty to be performed, is practically as rigid as if cast in a solid mass. The platen and the bridge, however, are cast in solid masses.

The Connecting Rods are formed by drop-forging in a finishing die; are of tough, mild, low-carbon, open-hearth steel, without welds; the crank-pin "eyes" being bushed. We have made over 7500 of these rods, and, so far as we know, the failures have not exceeded five-hundredths of one per cent. And we expect less in the future. We invite comparison of the "style" of these rods with the harsh, sharp-cornered productions ordinarily used.

The Crank-pins, Main Shaft, Bridge Shaft and Pinion Shaft are also made of forged steel; but of considerably higher carbon (hence stiffer and harder) than the connecting rods. They are finished by grinding and closely approximate true cylinders.

The Gears are cast from a special mixture of iron; close-grained, hard and tough. With the exception of the Quarto Medium, all have forged steel sections, fused into place, in which are cut the teeth that carry the cranks over the impression.

The Platen Action and the manner of controlling it are peculiar to our presses. The movement comprises three distinct phases. First, a direct, free and unrestrained slide to and from the form of about $\frac{3}{4}$ inch; second, a rapid intermediate swing, on rockers, in the shortest possible period of time; and, third, a slow continuation of this movement and thence a *very* slow period of reversal at an extreme angle of about 70° from the vertical. The action is exceedingly smooth and obtains the *largest* possible period of time for laying and removing the sheets. The practical result of this is, in effect, to produce a slow-moving "dwell"; which not only facilitates rapid feeding but close registration as well. All of these phases of the action are effected by a single, simple cam attached to and moving with the bridge in conjunction with the friction roller mounted in brackets on the frame. It should be said, in this connection, that when the impression is being taken the corresponding portion of the cam is relieved; the platen being solely guided by lugs on the insides of the bridge ears, acting upon the outer ends of seats formed integral with the frame.

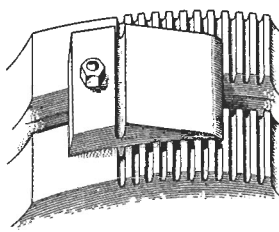


Platen Controlling Cam

The Duty of the Cam is light and it rarely requires repair or renewal. Several of the patents are still in force in this country. This device has been complimented by being *freely* adopted by at least half a dozen European copyists of our designs.

The Impression is Regulated entirely and with perfect evenness by the amount of tympan carried and by the latches which hold the throw-off lever. These latches *have tongues fitting in grooves in the arcs on the bridge*, making a slip impossible, even if the lock-nuts work loose.

By the use of these latches, through the eccentric adjusting sleeves which they control, no other adjustment of the platen is required.

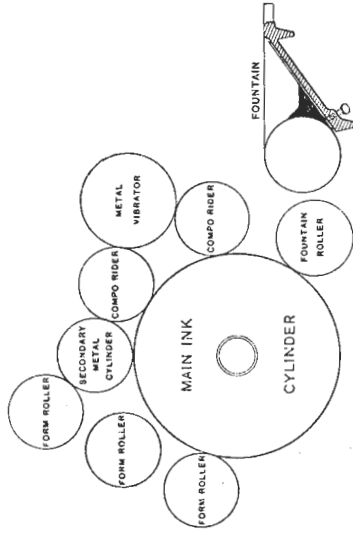


Latch Tongues and Grooves

The Ink Distribution is produced by a combination of continuously revolving and reciprocating ("vibrating") cylinders and composition rollers. This system, broadly, is not peculiar to our presses; but several of its features are exclusive and important. The fundamental advantage of the cylindrical method over the disk is that the distribution is going on continuously. Therefore, the ink is not only acted upon when the form rollers are up, but with almost, if not quite, the same spreading and smoothing effect while the form is being inked. A feature of controlling importance in our system consists in causing the main ink cylinder to slowly reciprocate as well as revolve; which produces direct rubbing, or smoothing, of the ink upon the form rollers

as well as upon the distributing rollers. In light, short-run jobs, the distributing rollers may be dispensed with; the cylinder producing an adequate result by its direct action upon the form rollers. This feature is patented.

The Ink Fountain Cylinder is rotated intermittently by a ratchet and pawl positively driven by the crank wheel; the arrangement and construction being such that the ductor roller is brought into contact with the cylinder before it is rotated. This produces a



End View of Inking Rollers, Etc.

very smooth action and permits engaging a greater number of teeth than by former methods. In half-tone or tint printing this is important; as the ink may then be fed to the ductor in a wide, thin *band* instead of a thick, lumpy line. This apparatus is patented.

The Carriage may be stopped on the cylinders or started down at will by simply operating the handle which is located towards the left-hand side, front of the press, and which is adjustable for wear of the toe of the hook on the shoe.

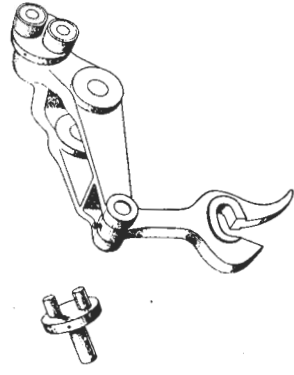
The Hook Connection which controls this action, automatically locks itself to a hardened and ground steel roller, preventing wear of the hook, lost motion and disengagement.

This construction is patented.

The Counterweight which overbalances the carriage is connected directly to the rocker shaft instead, as heretofore, of being swung inside of the frame upon a series of pins and link connections. This is simpler; more effective; smoother in action and requires less power to actuate.

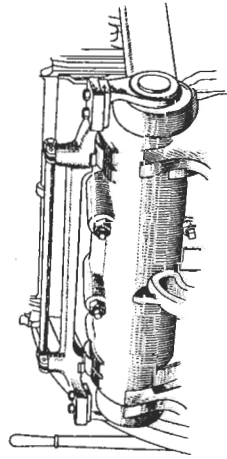
A Very Important Improvement recently patented, relates to the cam and cam lever which operate the rocker shaft, the counterweight and the carriage. This consists in applying *two* friction rollers, instead of one as hitherto, whereby the unit of pressure is reduced fifty per centum, and the bearing surfaces increased one hundred per centum. This apparatus has been tested in regular use for about four years and has proven as highly effective practically as it appears to be theoretically.

The steel studs, plate and wrist-pin, which carry the bronze rollers, are riveted together, and are hardened and ground to gauge. This device will, henceforth, obviate any serious wear or cutting of the driving cam in the main gear.



New Double Cam Roller will not Wear or Cut the Cam Way

A Recent Improvement which feeders will appreciate or "throw-off." In all presses of the Half Medium and Half Super Royal sizes the adjuster bar, which carries the eccentric throw-off and adjuster sleeves, is locked to the bridge by two steel slides, and two latches, the latter being depressed into engagement by two springs. This necessitates connecting the latches by means of a hand-rod. Heretofore, this has been a direct connection; hence the latches required to be elevated against the combined resistance of both springs, involving a rather stiff pull. But,



New Lever-action Throw-off

as may be understood from the illustrations, the present construction provides a lever action, in favor of the operator, so that the latches may be very quickly and easily elevated and the adjuster bar and sleeves be swung to prevent the impression from being made. The hand-rod may be grasped and operated at any position without cramping either of the latches. This improvement was devised and patented by Mr. F. W. Thomas, of Toledo, Ohio, from whom we purchased the patent.

In the Styles Two-A and Five-A the platen may be adjusted, forward or back, by means of impression bolts; the heads of outside

jack-bolts, at the corners, being first relieved from contact if the platen is to be drawn from the bed. But this rarely, very rarely, is necessary; as our initial adjustment is usually so accurate and approximates so high a maximum of the best practice respecting tympan building that an ample range of adjustment will be found by simply setting the adjuster slides up or down in the notches cut in the bridge section segments—up to increase the pressure; down to decrease. In this wise, if the desired tympan has been applied, the face thereof may be slightly set forward or back, with perfect parallelism, and in a fraction of the time that would be required either to manipulate the impression bolts or change the tympan sheets. In heavy forms it is preferable to employ such a thickness of tympan as will necessitate setting the slides well up on the arcs, as this lessens the torsional strain upon the sleeves, the adjuster bar and the latches. In the Style Six presses the platen rests upon solid bearings on the bridge, no pressure being borne by screws.

In Our New Enclosed Thread Changer which should be placed in the center slots of the carriage ways to operate upon *both* distributors, we present an old and well-tried device as to its effectiveness for performing its function; but which has been troublesome because of the limited durability of the crescent, or switch, that operates in the cross thread. A glance at the illustration will show how this has been



New Changer Roller, with Thread and Crescent Enclosed in Oil Chamber

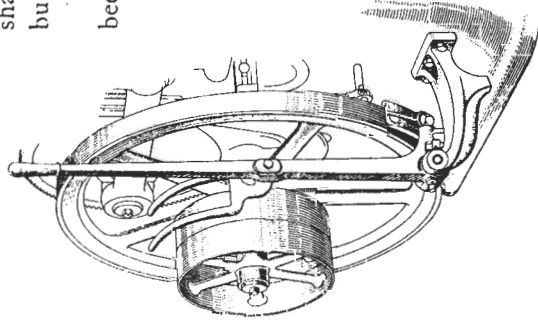
overcome. Thus, by disposing the thread and the crescent in the middle of the shaft and the cylinder, instead of towards their ends, this permits enclosing them within the cylinder which may be more or less filled with oil.

Upon each revolution of the cylinder, or sleeve, the crescent is flooded with oil, which it conveys to the surfaces of the screws; hence the endurance of the parts is all that can be desired. Oil is introduced by removing the hollow screw which serves as a bearing for the crescent. Should the oil leak past the hollow screw, apply wax or ink to its threads. To remove the screw shaft, withdraw the hollow screw and turn the sleeve so that the crescent will drop into the hollow screw cavity and disengage the cross threads. To insert the crescent, first attach it to a piece of string or fine wire passed through the hollow screw bearing; then draw it into place; next insert the screw shaft and finally the hollow screw; but don't jam the crescent.

This improvement has recently been covered by a number of patents.

In Our Combined Brake and Belt Shifter

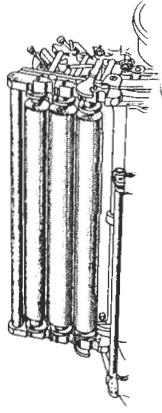
its effectiveness can be best appreciated by a trial. The fly-wheel can be stopped in a fraction of a revolution; as the shoe, in effect, "jams" against the face of the wheel, producing, with a moderate thrust from the operator, a very high coefficient of friction.



Belt Shifter and Jam Brake

The Carriage is now constructed with one tie-rod, the upper; thus giving more free space at the top of the platen for projecting sheets or book-covers.

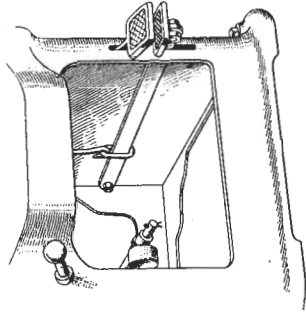
The carriage frames are adequately maintained relative to each other by using a steel rod of increased diameter.



Single Carriage Tie-rod

The Chase is Secured to the bed by a powerful hook controlled by a *protected* foot pedal. Thus, the pedal cannot be accidentally operated and both hands are free to manipulate the chase.

The Chases are Steel formed from drawn bars, interlocked at the corners. Their sides are parallel; they lie dead flat on the composing table; are very rigid and *cannot be broken*. Their construction is patented and we have an exclusive license to manufacture them. See the last page, in which the "frame" of the half-tone is an illustration of this chase.



Chase Latch Pedal with Protecting Guard

Our Improved Double Inking Attachment can be furnished with any of our machines except the Style One Quarto. When

not required for ordinary work it may, and *should*, be rendered inoperative by removing the latches from the carriage. By means of this device the lower carriage form roller is carried out of contact with the form on the down movement; but at the termination of the down motion the form roller boxes are automatically released. Hence, this roller, with its fresh and undisturbed charge of ink, is the last to act upon the form as the carriage passes upward.

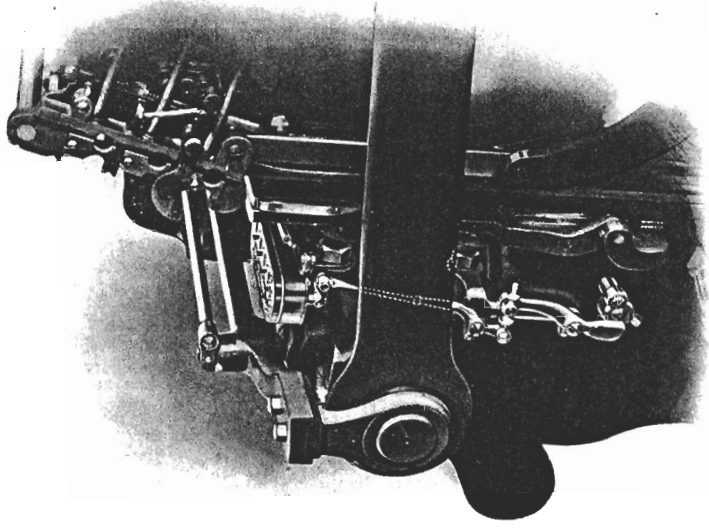
The Latches hold the carriage boxes of the lower form roller out until tripped at the bottom so that this roller inks the form on the up-motion. Consequently, the form is inked by the two upper rollers from the top, down and up; and by the lower roller from the bottom, up only; hence, delivering a fresh charge of ink in both directions at each impression. This device is particularly effective and is intended for forms requiring a heavy deposition of ink. In many instances it obviates double-rolling.

The New Impression Trip already referred to on page 12, is capable of instant operation, requiring but the touch of a finger, applied at any portion of the hand-rod, to disconnect the adjuster latches, and swing the eccentric sleeves. Attention is directed to the interlocked connection of the composition sleeve-shank with the steel adjuster bar, whereby the duty of the bolts is simply to hold the parts together; also to the modeling of the main connecting rod, formed by swaging in a steel die. See illustration, page 17.

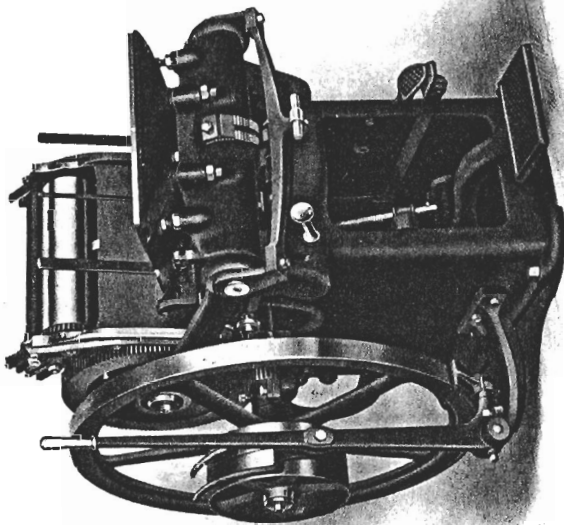
The Ramsaier Counter Attachment is arranged in such a manner that when the adjuster bar is tripped the counter is not operated;

hence, only actual impressions are recorded. This apparatus is well and substantially made; the material being of composition and steel. As the counter swings with the platen, the indices are constantly before the eye of the feeder.

Illustrations dimensions, weights, prices and shipping data, relative to Printing Presses, appear on the following pages.



Detail showing the Double Inking Latch on the Carriage; the New Lever Impression Trip and a Durant Counter with Ramsaier's Actuating Attachment



Quarto Medium, Style One

For High Speed Operation—See Page 6

Size 10 x 15 inches inside of chase. Carrying two form roller, two distributor and one vibrator stocks, each to be cast 2 inches in diameter.

| | |
|--|----------|
| Price of press, plain | \$290 00 |
| Price of driving pulleys, belt shifter and brake | 15 00 |
| Price of ink fountain | 20 00 |
| Price, complete, f.o.b. Long Island City, N. Y. | \$325 00 |

The following parts are included :

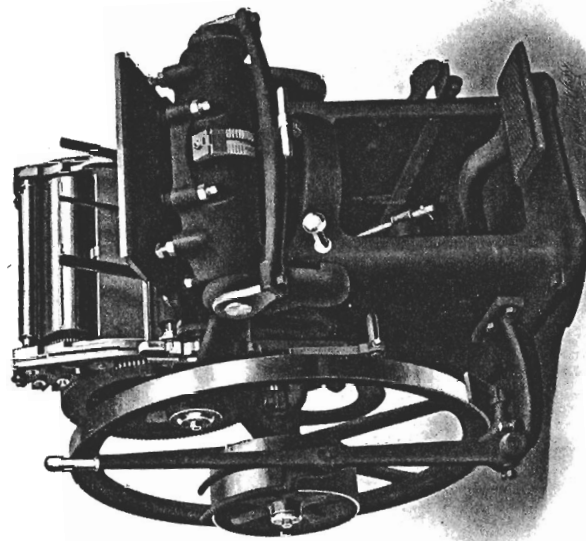
- 3 form roller stocks 5 chases
- 2 distributor stocks 2 feed tables
- 1 vibrator stock 2 feed table floor standards
- 4 distributor stock boxes 3 frisket fingers
- 4 form roller wheels, 1 1/8 ins. 1 treadle
- diameter 2 wrenches
- 4 form roller wheels, 1 7/8 ins. diameter

Floor Space of press without feed tables, 45 x 33 1/2 inches; face of feed tables, 12 x 18 inches; floor space of table base, 13 1/2 x 13 1/2 inches. Space through which press will pass when assembled, 33 1/2 inches; when wholly dismembered, 19 1/2 inches. Distance from center of pinion shaft to floor, 19 3/4 inches. Face and diameter of driving pulleys, 2 1/4 x 12 inches. Width of belt, 1 3/4 inches. Revolutions of fly-wheel to each impression, 6. Will operate safely and smoothly up to 2600 impressions an hour.

Can usually be supplied promptly upon receipt of order. The press and its parts are packed for shipment in three cases, as follows :

| | Dimensions Inches | Weight—Net Pounds | Weight—Gross Pounds |
|---------------------|-------------------|-------------------|---------------------|
| Press | 46 x 36 x 50 | 1150 | 1450 |
| Parts | 40 x 19 x 16 | 140 | 200 |
| Fly-wheel | 38 x 38 x 5 | 125 | 170 |
| | | 1415 | 1820 |

Terms upon application.



Quarto Medium, Style Two

For Medium Speed Operation—See Page 6

Size 10 x 15 inches inside of chase. Carrying three form roller, two distributor and one vibrator stocks, each to be cast 2 inches in diameter.

Price of press, plain \$315 00
 Price of driving pulleys, belt shifter and brake . . . 15 00
 Price of ink fountain 20 00

Price, complete, f. o. b. Long Island City, N. Y. . . \$350 00

When the double inking device is furnished, the price thereof will be \$15 extra, net.

The following parts are included:

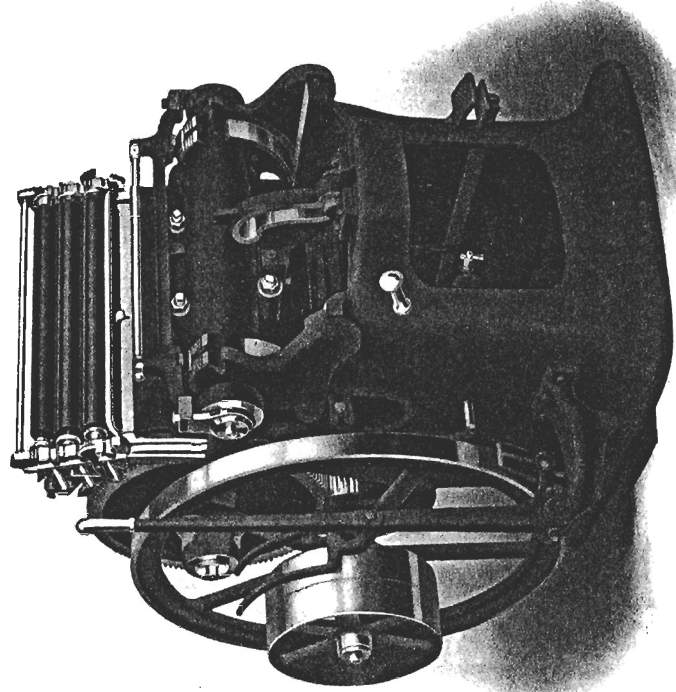
- 3 form roller stocks
- 2 distributor stocks
- 1 vibrator stock
- 4 distributor stock boxes
- 4 adjusting clamps
- 6 form roller wheels, 1 1/8 ins. diameter
- 6 form roller wheels, 1 7/8 ins. diameter
- 5 chases
- 2 feed tables
- 2 feed table floor standards
- 3 frisket fingers
- 1 treadle
- 3 wrenches

Floor Space of press without feed tables, 45 x 33 1/2 inches; face of feed tables, 12 x 18 inches; floor space of table base, 13 1/2 x 13 1/2 inches. Space through which press will pass when assembled, 33 1/2 inches; when wholly dismembered, 19 1/2 inches. Distance from center of pinion shaft to floor, 19 3/4 inches. Face and diameter of driving pulleys, 2 1/4 x 12 inches. Width of belt, 1 3/4 inches. Revolutions of fly-wheel to each impression, 6. Will operate safely and smoothly up to 2200 impressions an hour.

Can usually be supplied promptly upon receipt of order. The press and its parts are packed for shipment in three cases, as follows:

| | Dimensions Inches | Weight—Net Pounds | Weight—Gross Pounds |
|---------------------|----------------------|----------------------|------------------------|
| Press | 46 x 36 x 50 | 1200 | 1500 |
| Parts | 40 x 19 x 16 | 140 | 200 |
| Fly-wheel | 38 x 38 x 5 | 125 | 170 |
| | | 1465 | 1870 |

Terms upon application.



Half Medium, Style Two-A

With Heavy Frame Recently Designed from New Patterns
See Page 7

Size 13 x 19 inches inside of chase. Carrying three form roller, two distributor and one vibrator stocks, each to be cast 2 inches in diameter.

Price of press, plain \$460 00
 Price of driving pulleys, belt shifter and brake 15 00
 Price of ink fountain 25 00

Price, complete, f. o. b. Long Island City, N. Y. \$500 00

When the double inking device is furnished, the price thereof will be \$15 extra, net.

The following parts are included:

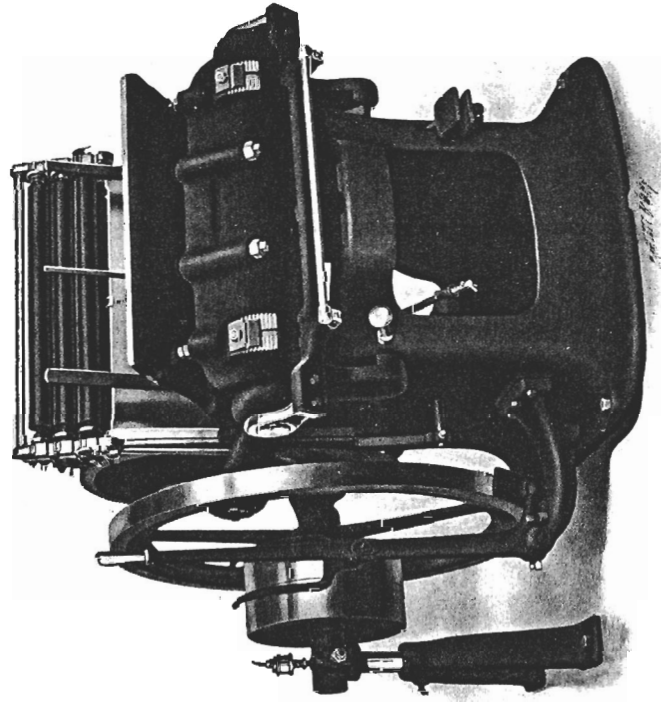
- 3 form roller stocks
- 2 distributor stocks
- 1 vibrator stock
- 1 changer
- 4 distributor stock boxes
- 4 adjusting clamps
- 6 form roller wheels, 1 1/8 ins. diameter
- 6 form roller wheels, 1 7/8 ins. diameter
- 5 chases
- 2 feed tables
- 2 feed table floor standards
- 3 frisket fingers
- 3 wrenches

Floor Space of press without feed tables, 41 x 48 inches; face of feed tables, 14 1/2 x 22 inches; floor space of table base, 13 1/2 x 13 1/2 inches. Space through which press will pass when assembled, 41 inches; when wholly dismembered, 29 1/2 inches. Distance from center of pinion shaft to floor, 19 inches. Face and diameter of driving pulleys, 3 x 14 inches. Width of belt, 2 1/2 inches. Revolutions of fly-wheel to each impression, 8 1/4. Will operate safely and smoothly up to 1800 impressions an hour.

Can usually be supplied promptly upon receipt of order. The press and its parts are packed for shipment in three cases, as follows:

| | Dimensions Inches | Weight—Net Pounds | Weight—Gross Pounds |
|---------------------|-------------------|-------------------|---------------------|
| Press | 50 x 41 x 56 | 2115 | 2450 |
| Parts | 42 x 19 x 18 | 200 | 250 |
| Fly-wheel | 38 x 38 x 5 | 135 | 175 |
| | | 2450 | 2875 |

Terms upon application.



Half Medium, Style Five-A

With Heavy Frame Recently Designed from New Patterns
See Page 7

Size 13 x 19 inches inside of chase. Carrying three form roller, two distributor and one vibrator stocks, each to be cast 2 inches in diameter.

Price of press, plain \$560 00
 Price of driving pulleys, belt shifter and brake 15 00
 Price of ink fountain 25 00

Price, complete, f. o. b. Long Island City, N. Y. \$600 00

When the double inking device is furnished, the price thereof will be \$15 extra, net.

The following parts are included:

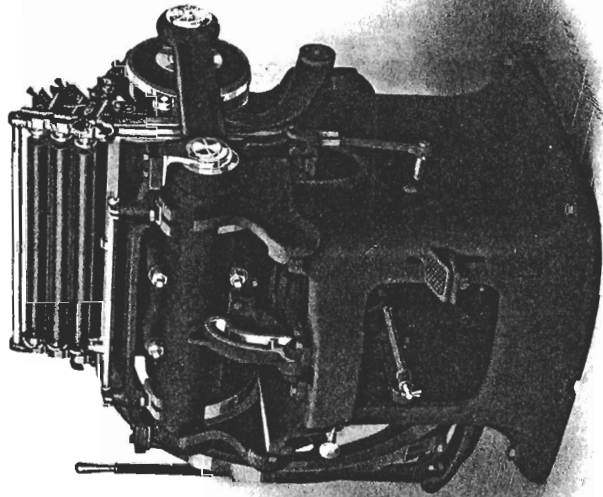
- 3 form roller stocks
- 2 distributor stocks
- 1 vibrator stock
- 1 changer
- 4 distributor stock boxes
- 4 adjusting clamps
- 6 form roller wheels, 1 7/8 ins. diameter
- 6 form roller wheels, 1 7/8 ins. diameter
- 5 chases
- 2 feed tables
- 2 feed table floor standards
- 3 frisket fingers
- 3 wrenches

Floor Space of press without feed tables, 48 x 46 inches; face of feed tables, 14 1/2 x 22 inches; floor space of table base, 13 1/2 x 13 1/2 inches. Space through which press will pass when assembled, 46 inches; when wholly dismembered, 29 1/2 inches. Distance from center of pinion shaft to floor, 19 inches. Face and diameter of driving pulleys, 3 1/4 x 14 inches. Width of belt, 3 inches. Revolutions of fly-wheel to each impression, 8 1/4. Will operate smoothly and safely up to 1800 impressions an hour.

Can usually be supplied promptly upon receipt of order. The press and its parts are packed for shipment in four cases, as follows:

| | Dimensions Inches | Weight—Net Pounds | Weight—Gross Pounds |
|---------------------|----------------------|----------------------|------------------------|
| Press | 50 x 35 x 56 | 2265 | 2600 |
| Parts | 42 x 19 x 18 | 165 | 220 |
| Pulleys | 37 x 23 x 9 | 110 | 160 |
| Fly-wheel | 40 x 40 x 5 | 175 | 225 |
| | | 2715 | 3205 |

Terms upon application.



Half Medium, Style Six-A

With Heavy Frame Recently Designed from New Patterns
See Page 7

Size 13 x 19 inches inside of chase. Carrying three form roller, two distributor and one vibrator stocks, each to be cast 2 inches in diameter.

| | |
|--|----------|
| Price of press, plain | \$585 00 |
| Price of driving pulleys, belt shifter and brake | 15 00 |
| Price of ink fountain | 25 00 |
| Price, complete, f. o. b. Long Island City, N. Y. | \$625 00 |

When the double inking device is furnished, the price thereof will be \$15 extra, net.

Gauges for book-cover or wood printing are charged for extra, price depending upon the requirements.

A steam blank, or a gas blank, can be furnished when required at an extra net cost, ordinarily, of \$75.

The following parts are included:

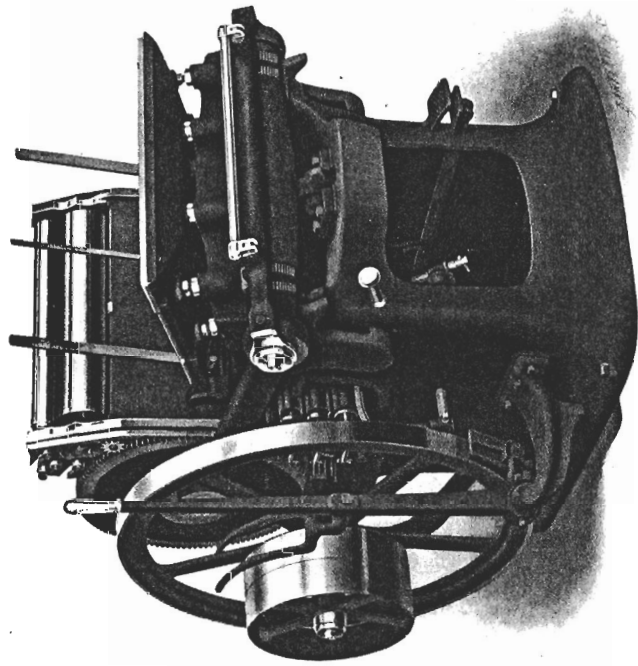
| | |
|---|---|
| 3 form roller stocks | 6 form roller wheels, 1 $\frac{7}{8}$ ins. diameter |
| 2 distributor stocks | 5 chases |
| 1 vibrator stock | 2 feed tables |
| 1 changer | 2 feed table floor standards |
| 4 distributor stock boxes | 3 frisket fingers |
| 4 adjusting clamps | 2 wrenches |
| 6 form roller wheels, 1 $\frac{1}{8}$ ins. diameter | |

Floor Space of press without feed tables, 48 x 46 inches; face of feed tables, 14 $\frac{1}{2}$ x 22 inches; floor space of table base, 13 $\frac{1}{2}$ x 13 $\frac{1}{2}$ inches. Space through which press will pass when assembled, 46 inches; when wholly dismembered, 29 $\frac{1}{2}$ inches. Distance from center of pinion shaft to floor, 19 inches. Face and diameter of driving pulleys, 3 $\frac{1}{4}$ x 14 inches. Width of belt, 3 inches. Revolutions of fly-wheel to each impression, 8 $\frac{1}{4}$. Will operate smoothly and safely up to 1800 impressions an hour.

Can usually be supplied promptly upon receipt of order. The press and its parts are packed for shipment in four cases, as follows:

| | Dimensions Inches | Weight—Net Pounds | Weight—Gross Pounds |
|---------------------|----------------------|----------------------|------------------------|
| Press | 50 x 35 x 56 | 2265 | 2600 |
| Parts | 42 x 19 x 18 | 165 | 220 |
| Pulleys | 37 x 23 x 9 | 110 | 160 |
| Fly-wheel | 40 x 40 x 5 | 175 | 225 |
| | | 2715 | 3205 |

Terms upon application.



Half Super Royal, Style Two-A

With Heavy Frame Recently Designed from New Patterns
See Page 7

Size 14 x 22 inches inside of chase. Carrying three form roller, two distributor and one vibrator stocks, each to be cast 2 inches in diameter.

Price of press, plain \$535 00
 Price of driving pulleys, belt shifter and brake 15 00
 Price of ink fountain 25 00

Price, complete, f. o. b. Long Island City, N. Y. \$575 00

When the double inking device is furnished, the price thereof will be \$15 extra, net.

The following parts are included:

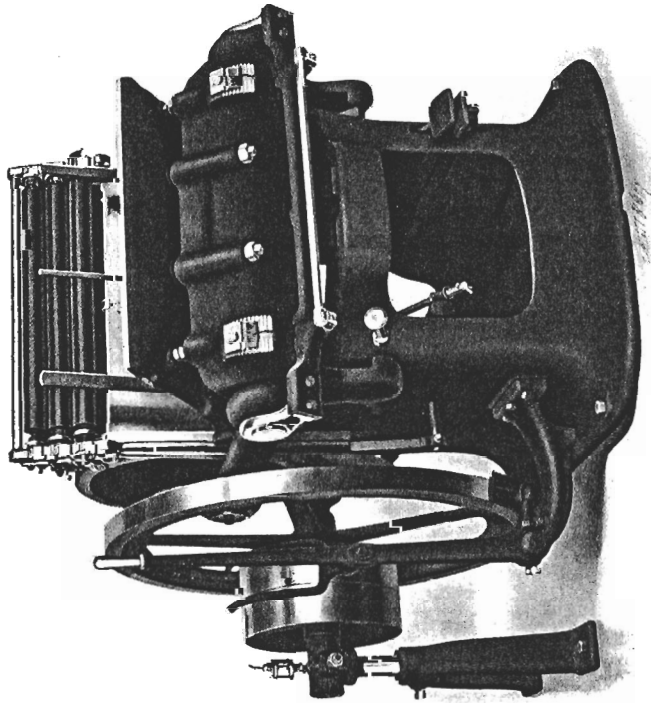
- 3 form roller stocks
- 2 distributor stocks
- 1 vibrator stock
- 1 changer
- 4 distributor stock boxes
- 4 adjusting clamps
- 6 form roller wheels, 1 7/8 ins. diameter
- 6 form roller wheels, 1 7/8 ins. diameter
- 5 chases
- 2 feed tables
- 2 feed table floor standards
- 3 frisket fingers
- 3 wrenches

Floor Space of press without feed tables, 48 x 44 inches; face of feed tables, 14 1/2 x 22 inches; floor space of table base, 13 1/2 x 13 1/2 inches. Space through which press will pass when assembled, 43 inches; when wholly dismembered, 32 1/2 inches. Distance from center of pionin shaft to floor, 19 inches. Face and diameter of driving pulleys, 3 1/4 x 14 inches. Width of belt, 2 1/2 inches. Revolutions of fly-wheel to each impression, 8 1/4. Will operate safely and smoothly up to 1700 impressions an hour.

Can usually be supplied promptly upon receipt of order. The press and its parts are packed for shipment in three cases, as follows:

| | Dimensions Inches | Weight—Net Pounds | Weight—Gross Pounds |
|---------------------|----------------------|----------------------|------------------------|
| Press | 50 x 44 x 56 | 2310 | 2650 |
| Parts | 42 x 19 x 18 | 200 | 250 |
| Fly-wheel | 38 x 38 x 5 | 135 | 175 |
| | | 2645 | 3075 |

Terms upon application.



Half Super Royal, Style Five-A

With Heavy Frame Recently Designed from New Patterns
See Page 7

Size 14 x 22 inches inside of chase. Carrying three form roller, two distributor and one vibrator stocks, each to be cast 2 inches in diameter.

Price of press, plain \$610 00
 Price of driving pulleys, belt shifter and brake 15 00
 Price of ink fountain 25 00

Price, complete, f. o. b. Long Island City, N. Y. \$650 00.

When the double inking device is furnished, the price thereof will be \$15 extra, net.

The following parts are included:

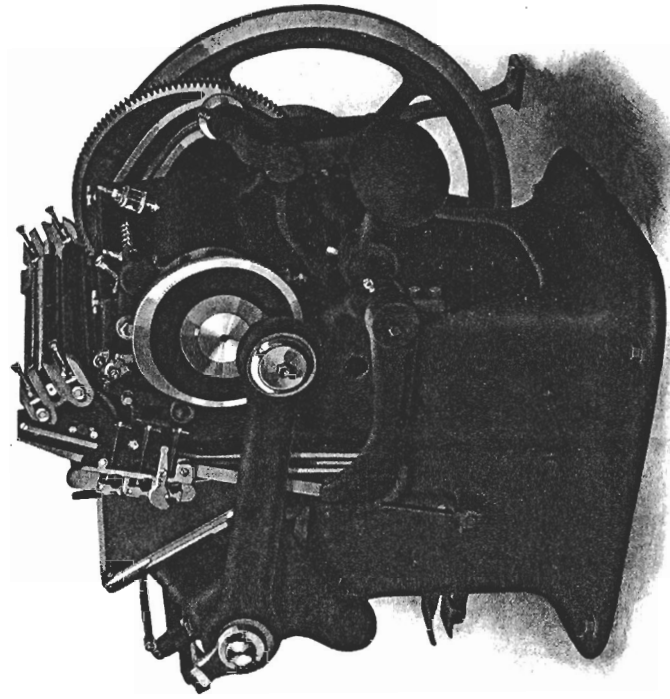
- 3 form roller stocks
- 2 distributor stocks
- 1 vibrator stock
- 1 changer
- 4 distributor stock boxes
- 4 adjusting clamps
- 6 form roller wheels, 1 1/8 ins. diameter
- 6 form roller wheels, 1 7/8 ins. diameter
- 5 chases
- 2 feed tables
- 2 feed table floor standards
- 3 frisket fingers
- 3 wrenches

Floor Space of press without feed tables, 48 x 51 inches; face of feed tables, 14 1/2 x 22 inches; floor space of table base, 13 1/2 x 13 1/2 inches. Space through which press will pass when assembled, 51 inches; when wholly dismembered, 32 1/2 inches. Distance from center of pinion shaft to floor, 19 inches. Face and diameter of driving pulleys, 3 1/4 x 14 inches. Width of belt, 3 inches. Revolutions of fly-wheel to each impression, 8 1/4. Will operate smoothly and safely up to 1700 impressions an hour. Can usually be supplied promptly upon receipt of order.

The press and its parts are packed for shipment in four cases, as follows:

| | Dimensions Inches | Weight--Net Pounds | Weight--Gross Pounds |
|---------------------|----------------------|-----------------------|-------------------------|
| Press | 50 x 38 x 56 | 2460 | 2800 |
| Parts | 42 x 19 x 18 | 165 | 220 |
| Pulleys | 37 x 23 x 9 | 110 | 160 |
| Fly-wheel | 40 x 40 x 5 | 175 | 225 |
| | | 2910 | 3405 |

Terms upon application.



Half Super Royal, Style Six-A

With Heavy Frame Recently Designed from New Patterns
See Page 7

Size 14 x 22 inches inside of chase. Carrying three form roller, two distributor and one vibrator stocks, each to be cast 2 inches in diameter.

| | |
|--|----------|
| Price of press, plain | \$685 00 |
| Price of driving pulleys, belt shifter and brake | 15 00 |
| Price of ink fountain | 25 00 |
| Price, complete, f. o. b. Long Island City, N. Y. | \$725 00 |

When the double inking device is furnished, the price thereof will be \$15 extra, net.

Gauges for book-cover or wood printing are charged for extra, price depending upon the requirements.

A steam blank, or gas blank, can be furnished when required at an extra net cost, ordinarily, of \$75.

The following parts are included:

| | |
|--|---|
| 3 form roller stocks | 6 form roller wheels, 1 $\frac{7}{8}$ ins. diameter |
| 2 distributor stocks | 5 chases |
| 1 vibrator stock | 2 feed tables |
| 1 changer | 2 feed table floor standards |
| 4 distributor stock boxes | 3 frisket fingers |
| 4 adjusting clamps | 2 wrenches |
| 6 form roller wheels, 1 $\frac{1}{4}$ ins. diam. | |

Floor Space of press without feed tables, 48 x 51 inches; face of feed tables, 14 $\frac{1}{2}$ x 22 inches; floor space of table base, 13 $\frac{1}{2}$ x 13 $\frac{1}{2}$ inches. Space through which press will pass when assembled, 51 inches; when wholly dismembered, 32 $\frac{1}{2}$ inches. Distance from center of pinion shaft to floor, 19 inches. Face and diameter of driving pulleys, 3 $\frac{1}{4}$ x 14 inches. Width of belt, 3 inches. Revolutions of fly-wheel to each impression, 8 $\frac{1}{4}$. Will operate smoothly and safely up to 1700 impressions an hour.

Can usually be supplied promptly upon receipt of order.
The press and its parts are packed for shipment in four cases, as follows:

| | Dimensions Inches | Weight—Net Pounds | Weight—Gross Pounds |
|---------------------|----------------------|----------------------|------------------------|
| Press | 50 x 38 x 56 | 2460 | 2800 |
| Parts | 42 x 19 x 18 | 165 | 220 |
| Pulleys | 37 x 23 x 9 | 110 | 160 |
| Fly-wheel | 40 x 40 x 5 | 175 | 225 |
| | | 2910 | 3405 |

Terms upon application.

On the Care and Operation of Our Platen Printing Presses

We Believe Ourselves to be conservatively within the truth in asserting, as we do, that at least seventy-five per centum of the dissatisfactory cases with respect to the endurance of printing presses, which have come to our attention, are caused by *filth*. Ink, dust, effete oil, grease and metallic particles *if permitted* to remain on finished bearing surfaces will defeat "the best laid schemes," mechanically, that the mind and hand of man can design and fabricate. In many of the most modern and closely organized manufacturing concerns in the world, where every minute of the working time is accounted for, a certain time of each day is set aside to be energetically expended in cleaning up machinery. And this is not a finickyism; but is done simply and solely because *it pays to do it*.

Our Presses are Adjusted purposely, for hard, thin tympan. There is rarely a case where the archaic practice of printing on a *pad* is justifiable, especially so in our presses where the platen impinges, after a long-drawn slide, dead-square upon the form.

If a Slur Appears Only along the upper portion of a sheet, this is usually caused by the frisket fingers biting the sheet too hard at the bottom, and not hard enough at the top. This condition is nearly always produced by tympan of greater thickness than that for which the frisket frame is adapted. In such cases the handiest remedy is to insert card-board washers between the fingers and the face of the frisket frame: thus throwing.

out the "heels" of the fingers and equalizing their contact upon the sheet.

If a Slur Appears Entirely across the face of the platen, showing downwardly, it may be caused by wear of the bridge gibs. This can be corrected readily by inserting packing between the gibs and their bearings.

Electrotypes, Half-tones and the Like should be gauged to ascertain if under or over type-high. The error in such work is frequently considerable, sufficient to produce too much or too little contact of the form rollers.

Especially in Half-tones and Rule Forms the form rollers ought to make light rolling contact. If the rollers press upon forms too hard they are liable to fill the fine etchings on the plate or to be so indented by the rules that the deformations thus caused will produce reprints.

The Shrinkage of Composition Form Rollers is frequently the cause of much trouble. This should be looked after carefully and provided for by a proper adaptation of roller wheels.

In Adjusting the Ink Fountain we recommend that, especially in half-tone and heavy tints, the cylinder be rotated to its greatest extent and the ductor roller be set to make light contact thereon, controlling the flow by adjustment of the ink-blade. The advantage of this is that a thin and broad band of ink will

be transferred to the main cylinder; hence, will be more quickly and thoroughly distributed.

The Distributer Rollers ought to be adjusted into moderate contact with the cylinders. Excessive pressure does not assist the distribution and imposes needless work upon the machine.

The Press Ought to be Set On and firmly bolted to a solid foundation. It should be approximately level cross-wise of the machine, that is, in the direction of the shafts; but may be inclined either forward or back, as desired, and under either of these conditions will work without detriment.

All Forms Should be Set or so disposed, that the center of pressure shall not be above the center of the platen shaft and the crank-pins, when the latter are on the impression. The advantage of this is that the torsional strain, due to the fact that the cranks begin to pull *before* the dead center is reached, is transmitted downwardly and is resisted by the solid mass of the frame. This is a generic principle and applies equally well to all styles of platen presses. It is easy enough to latch down the front toe of the platen; but this in fact is a mere pretence, in that the location, with respect to the strain to be resisted, is very disadvantageous. The instances in which this has been done, as in the German and some other partial copies of our presses, would be paralleled by making the connecting rods of cast-iron or the bearings of lead! In our opinion, it is preferable to make agreeable acquaintance with the principle and go with it; not against it! Besides, by following this simple practice, the wear on the slides is

more uniform; the parallelism of the platen rarely, if ever, requires readjustment and there is less tendency to slur and break down the edges of the rules or types.

When a Press is First Put Into Commission we recommend that for a week or ten days it be operated with a light impression and at a moderate rate of speed; also that the bearings, the bridge cam, the rockers and the rocker slides be frequently wiped off and then oiled. This practice cannot be beaten: try it.

Controllable Feed Oil Cups of large capacity are applied to the principal bearings. It pays to use oil of the best, the very best, quality. We recommend the refined and filtered mineral lubricating oils, such as are used on steam engines and dynamos. Better results will be obtained by applying a small quantity of lubricant frequently than a large quantity at long intervals.

For the Slides of the Frame those upon which the platen operates, and for the pinions and gear teeth, we recommend a heavy mineral oil or a mixture of Dixon's flake lubricating graphite (their No. 632 in one-pound can), mixed with vaseline. Clean this off occasionally, wipe dry and re-apply, and the metal surfaces will ultimately become smooth and hard. A convenient way to make this compound is to melt the vaseline and then add graphite to the limit. The principal function of the vaseline is to keep the graphite in place. This mixture should not, in our opinion, be applied to closed bearings.

Keep the Press Clean Wipe the slides and bearings and the gear and pinion teeth now and then; or, better yet, do it, or see that it is done, at regular intervals, and done well; rub hard and dry; after this apply a good dose of clean oil. This advice is not based on mere theory but upon experience; for we have found that the time thus employed is not lost; it pays.

Overhead Pulleys and Belt Connections

When Desired We Can Furnish complete sets of overhead power fixtures with the belts. To do this the following information is necessary:

First: Give the number of revolutions per minute of the main or driving shaft.

Second: Give its diameter *accurately*.

Third: State the number of speed changes required; this is usually three or four.

Fourth: State the highest and also the lowest rate, in impressions per minute, at which the press is desired to be operated.

From these data we will, when desired, compute the dimensions and furnish the nearest *market sizes* of pulleys. See "Pulley Problems," page 76.

Electric Motor Connections

Up to the Present Time it is our opinion that the most satisfactory method for connecting high-speed electric motors to platen printing or embossing presses is by means of belts; the motor resting directly upon the floor, or upon a stand about the height of the pinion shaft, or mounted against a side wall, or suspended from the ceiling.

We Recommend the use of our tight and loose pulleys as usually mounted on the pinion shaft, outside of the fly-wheel; the belt-shifter fork to be mounted on the brake lever, as in our regular arrangement. In this wise, the press may be intermittently stopped or started at will without opening and closing the electric circuit; the motor being separately controlled by its hand switch.

When the Belt Comes from Below or in a general horizontal direction from behind, a special belt-shifter fork must be made, adapted to the conditions, and is charged for extra.

Where a Line of Presses is to be operated and the speed conditions are fairly uniform, then an excellent compromise arrangement is to attach a single motor directly to the overhead shaft, preferably about the center thereof, the belts passing down, right and left, to the several machines. This presupposes convenient and effective electric switching apparatus for changing the speed of the motor.

Important Dimensions for Motor Application

| | Size of Press Inches | | |
|--|-------------------------|----------|----------|
| | 1/4 S. R. | 1/2 Med. | 3/4 Med. |
| Largest pulley that will clear brake lever | 23 | 23 | 18 |
| Largest pulley that will clear belt-shifter fork | 19 | 19 | 25 1/2 |
| Center of pinion shaft from floor | 18 5/8 | 18 5/8 | 19 1/2 |
| Length of pinion shaft beyond face of fly-wheel | 3 3/8 | 3 3/8 | 1 1/8 |
| Diameter of pinion shaft beyond face of fly-wheel | 1 7/8 | 1 7/8 | 1 1/8 |
| Length of pinion shaft beyond hub of fly-wheel | 2 1/2 | 2 1/2 | 1 1/8 |
| Length of key in pinion shaft outside of fly-wheel | 2 1/2 | 2 1/2 | 1 1/8 |
| Width of key | 1/2 | 1/2 | 1/2 |

Pulleys Larger than Our Regular Stock Sizes may be applied,

these usually being furnished special with the motor. In this connection the foregoing table will be found serviceable.

Horse-power

Our Machines Require from the lightest to the heaviest, for their operation when running *light*, from fifteen to twenty-five hundredths of a horse-power; the additional power required for distribution of the ink, or for the impression, being about as much more. It should be distinctly borne in mind, however, that these figures are subject to considerable variation, depending largely upon special conditions. Again, bearing in mind the old and well-known axiom, that the friction of rest is greater than that of motion, it is essential to satisfactory operation, the kind that is met with in regular practice, that there shall be an excess, or reserve, of power in the motor, else there will be vexatious loss of time in starting up and a greater number of burnouts and expensive interruptions.

We are Not in Position to indicate a hard and fast rule, but have so far found that good results have followed our usual recommendation with respect to the power rating of motors to our machines. This, usually, is as follows: For the Quarto Press, one-half horse; for the Half Medium and Half Super Royal, Style Two, three-quarter horse; for the Half Medium and Half Super Royal, Styles Five and Six, one horse.