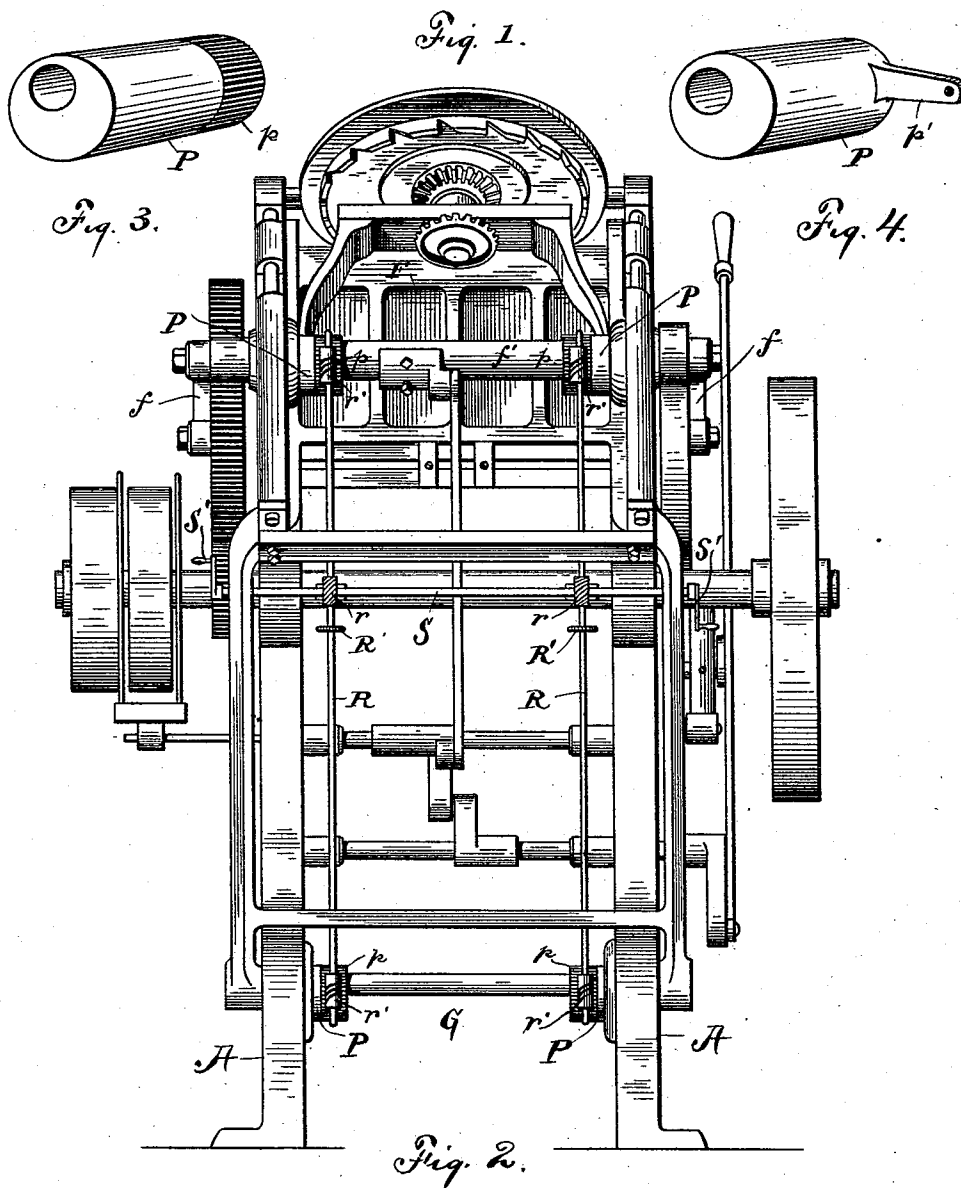


(No Model.)

W. H. PRICE, Jr.
PLATEN PRINTING PRESS.

No. 469,215.

Patented Feb. 16, 1892.



Witnesses:
E. Ryan Gilchrist.
[Signature]

Inventor:
Wm H Price Jr.
[Signature]
Attorneys

UNITED STATES PATENT OFFICE.

WILLIAM H. PRICE, JR., OF CLEVELAND, OHIO, ASSIGNOR TO CHANDLER
& PRICE, OF SAME PLACE.

PLATEN PRINTING-PRESS.

SPECIFICATION forming part of Letters Patent No. 469,215, dated February 16, 1892.

Application filed May 14, 1891. Serial No. 392,733. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. PRICE, JR., of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Platen Printing-Presses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in what is known as "platen printing-presses," the object being to provide means for quickly and accurately adjusting the pressure, as between the type and platen, as may be necessary—for instance, in changing from one thickness of paper, card-board, or other material on which the printing is being done to another thickness of material. To accomplish the desired end, I shift the bed bodily forward and back by means of four eccentric bushings having equal throw, two of these bushings being arranged above and two below, and by revolving these bushings in unison the desired effect is produced. I have chosen to illustrate my present invention in connection with a printing-press shown and described in United States Letters Patent No. 318,798, granted to me May 26, 1885, to which press is preferably added the improved throw-off shown and described in United States Letters Patent No. 420,017, granted to me January 21, 1890.

In applying my invention I use the press entirely as described in these patents, and hence do not consider it necessary to describe the entire press in detail. The members that I add to the press in carrying out my invention are clearly shown in the accompanying drawings.

Figure 1 is a rear elevation of a press embodying my invention. Fig. 2 is an enlarged elevation in detail of the screw-gears employed, such gears being well known. Fig. 3 is a view in perspective in detail of one of the eccentric bushings P. Fig. 4 is a modification.

Referring to Fig. 1, F is the bed-plate and is provided with arms *f*, that are mounted on shaft *f'*, that is journaled in frame A. I bore larger holes in frame A and provide an eccen-

tric bushing P for each end of shaft *f'*, this shaft being journaled in the bore of these bushings and the latter being journaled in the lateral holes of frame A. In like manner I also provide shaft G at each end with one of these eccentric bushings and bore the lateral holes in the frame of sufficient size to receive the bushings, whereby shaft G may turn in the bore of these bushings and the latter may turn in their seats in the frame. The four bushings P have equal throw the one with the other. The inner end of each bushing is provided, for instance, with a worm-gear *p*, the teeth thereof being usually cut on the bushing, although the worm-gear could be made separate and afterward attached to the bushing, if so preferred.

R R are upright shafts provided with worms *r' r' r' r'* for engaging, respectively, the worm-gears *p*, whereby the two eccentric bushings P that are actuated by the same shaft R are revolved in unison.

S is a lateral shaft intergeared at *r* with shafts R R, shaft S having one or more cranks *S'* or hand-wheels for rotating the shaft, by which rotation the four eccentric bushings P are rotated in unison, whereby the bed and its frame may be moved bodily toward or from the platen without changing the relative alignment of these members. The worms on shafts R R and the worm-gears on these shafts and on shaft S are preferably secured by means of set-screws, and shafts R R are preferably provided with hand-wheels, as at *R'*, for respectively rotating these shafts, so that by loosening the set-screws of any of these worms or worm-gears either shaft R and any one of the bushings P may be rotated as may be necessary—for instance, in adjusting the parts. The parts having been adjusted to the thickness of the paper or card-board being used, it is sometimes necessary to give a little more pressure on one side of the bed or on the top or bottom of the bed by reason of their being more or heavier lines to be printed on one portion, and all such adjustments may be made by means aforesaid; but in all ordinary cases the adjustments of the thickness of paper or material being printed is done by manipulating one of the cranks *S'*.

The shafts and gears for connecting the dif-

ferent eccentric bushings, although well adapted to the purpose, are not essential, as various other well-known mechanical devices would answer the purpose. For instance, the
5 eccentric bushings could be provided with arms p' , as shown in Fig. 4, and these could be operated by levers or other means to produce the same result.

What I claim is—

10 In a platen printing press, the combination, with the fulcrum-shaft of the bed and the bed-shaft connecting with the side arms of the press, of eccentric bushings mounted on these shafts, these bushings being journaled in suit-

able bearings or lateral holes in the bed and 15 frame, the different bushings being intergeared or operatively connected, so that they may be turned in unison on their axes in moving the bed toward and from the platen, substantially as set forth. 20

In testimony whereof I sign this specification, in the presence of two witnesses, this 13th day of March, 1891.

WILLIAM H. PRICE, JR.

Witnesses:

C. H. DORER,

WARD HOOVER.