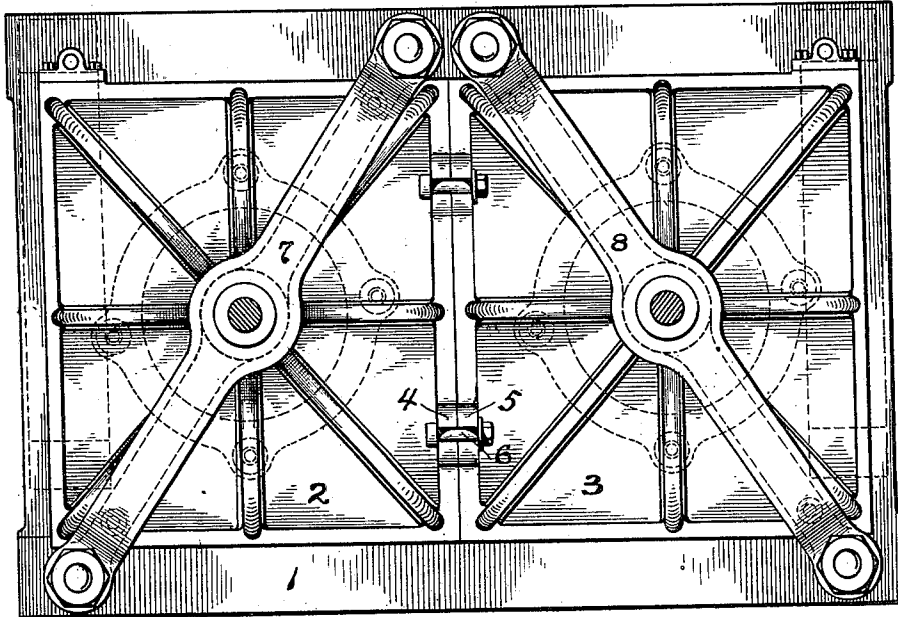


G. E. PANCOAST.
MATRIX DRYING PRESS.
APPLICATION FILED MAY 13, 1911.

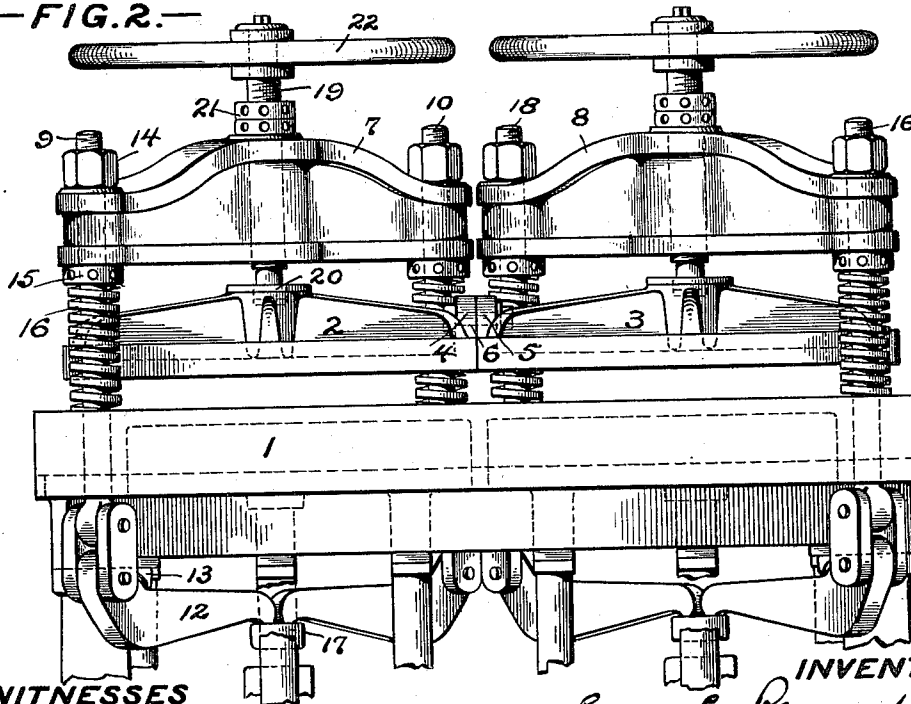
1,008,556.

Patented Nov. 14, 1911.

—FIG.1.—



—FIG.2.—



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UNITED STATES PATENT OFFICE.

GEORGE E. PANCOAST, OF NEW YORK, N. Y., ASSIGNOR TO R. HOE AND CO., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

MATRIX-DRYING PRESS.

1,008,556.

Specification of Letters Patent. Patented Nov. 14, 1911.

Application filed May 13, 1911. Serial No. 626,973.

To all whom it may concern:

Be it known that I, GEORGE E. PANCOAST, a citizen of the United States, residing at New York, county of New York, and State of New York, have invented certain new and useful Improvements in Matrix-Drying Presses, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to improvements in matrix drying presses.

Matrix drying presses usually comprise a heated drying table on which the chase containing the type and the soft matrix are placed, and a pressure producing platen which forces the matrix into the type, the pressure being maintained until the matrix is formed and dried. In a common form of such presses there is employed a yoke which spans the table and is secured to it, the pressure on the platen being produced by a screw which has a swivel connection with the platen and is tapped through a threaded opening in the yoke, the swivel connection not only permitting the screw to be turned without revolving the platen, but, by reason of its looseness, enabling the platen to compensate for slight unevennesses in the surfaces on which the platen works. On account of the heavy pressure which is required to force and hold the matrix against the type, and the limitations as to size and weight of the parts imposed by the requirements of a press-room, the size of the platen which can be employed is restricted within certain well defined limits, and such presses are ordinarily built to accommodate only a single chase adapted to contain a form of newspaper size. The requirements of some offices have been such, however, as to require the construction of matrix presses of double the size referred to, that is, of a size which will accommodate two forms. Such presses, as heretofore constructed, have employed a single yoke spanning the table and two platens, the yoke being provided with two threaded openings—an opening substantially over the center of each platen—the pressure producing screws being located in the threaded openings and swiveled to the platens. This construction requires the employment of a very large and heavy yoke not only to sustain the strains produced by operating two

platens when both are employed, but to prevent distortion and spring when, as is frequently the case, it is desired to use one of the platens in connection with a single form.

The present invention has for its object to produce a matrix drying press which is capacitated to receive two chases or forms each of newspaper size, the construction being such that the parts employed are not of undue size and weight, and which may be used to receive and operate upon either one or two forms without liability of undue or unequal strains.

With this and other objects not specifically referred to in view, the invention consists in certain constructions and in certain parts, improvements and combinations as will be hereinafter fully described and then specifically pointed out.

Referring to the accompanying drawings—Figure 1 is a plan view of a matrix press constructed in accordance with the invention. Fig. 2 is a side elevation of the construction illustrated in Fig. 1.

Referring to said drawings, 1 indicates a heated drying table which may be heated in any usual way. A pair of side by side platens 2, 3 are employed in connection with this drying table. These platens should be constructed so as to have their adjacent edges close to each other, and if desired the platens may be detachably connected. In the particular construction illustrated, the platen 2 is provided with a pair of ears 4, and the platen 3 with a pair of similar ears 5, these ears being connected by bolts 6. When these bolts 6 are in position the two platens may operate as a single platen.

Constructions embodying the invention will include a pair of yokes, one for each platen, these yokes, in the construction shown, being marked 7, 8. In the best constructions embodying the invention, these yokes will be straight and will cross the centers of the platens. Whatever be the construction of the yokes employed in carrying the invention into effect, they will, however, diverge at their forward ends or at the front side of the table, as shown, so as to permit ready access to the table, thus enabling the forms to be slid conveniently into and out of position on the table. While the diverging yokes may be mounted in various ways, in the particular construction shown, they are made movable, the yoke 7

being mounted on rods 9, 10, these rods extending through the table and being connected by links 11 to a bent lever 12 operating against a fulcrum 13. The rods pass through the yoke and are connected thereto by nuts 14 and collars 15, returning springs 16 being employed to raise the yoke in opposition to the movement produced by the bent levers. The inner ends of the bent levers, in the particular construction shown, rest upon and are operated by a plunger 17 which may be operated in any suitable way, as, for instance, by air pressure. The yoke 8 is carried and operated by rods 18, but as the connections between the yoke and the operating connections for these rods are in all respects similar to those described for the rods 9, 10 a description thereof is unnecessary.

The connections employed between each yoke and its platen for producing pressure on the platen may be of any suitable character. In the particular construction shown, each yoke has a screw 19 passing through a suitable threaded opening therein, these screws being connected to the platens 2, 3 by swiveled joints generally indicated at 20. In the particular construction illustrated, the screws are employed for adjusting the position of the platens and are provided with lock nuts 21 to hold them in position after the adjustment has been obtained, the screws being manipulated by hand wheels 22. In the particular construction shown, the operating movement of the platens is effected by the operation of the plungers 17 through the connections described. It is apparent that by locking the plungers in position in any suitable way and loosening the lock nuts, the screws may be depended upon to produce the pressure.

Changes and variations may be made in the construction by which the invention claimed is carried into effect. The invention claimed is not, therefore, to be confined to the particular construction herein described and illustrated in the accompanying drawings.

What is claimed is:—

1. In a matrix drying press, the combination with a table, of a pair of side by side platens cooperating therewith, a pair of yokes one for each platen, said yokes diverg-

ing at their forward ends, and connections between each yoke and its platen for producing pressure on the platen.

2. In a matrix drying press, the combination with the table, of a pair of side by side platens cooperating therewith, a pair of movable yokes one for each platen, said yokes diverging at their forward ends, connections between each yoke and its platen for producing pressure on the platen, and means for operating the yokes.

3. In a matrix drying press, the combination with the table, of a pair of side by side platens cooperating therewith, detachable connections between the platens, a pair of yokes one for each platen, said yokes diverging at their forward ends, and connections between each yoke and its platen for producing pressure on the platen.

4. In a matrix drying press, the combination with the table, of a pair of side by side platens cooperating therewith, detachable connections between the platens, a pair of movable yokes one for each platen, said yokes diverging at their forward ends, connections between each yoke and its platen for producing pressure on the platen, and means for operating the yokes.

5. In a matrix drying press, the combination with the table, of a pair of side by side platens cooperating therewith, a pair of straight yokes, one for each platen, said yokes diverging at their forward ends and each yoke crossing the center of its platen, and connections between each yoke and its platen for producing pressure on the platen.

6. In a matrix drying press, the combination with the table, of a pair of side by side platens cooperating therewith, a pair of straight movable yokes one for each platen, said yokes diverging at their forward ends and each yoke crossing the center of its platen, connections between each yoke and its platen for producing pressure on the platen, and means for operating the yokes.

In testimony whereof, I have hereunto set my hand, in the presence of two subscribing witnesses.

GEORGE E. PANCOAST.

Witnesses:

JAMES Q. RICE,
A. WHITE.