(No Model.)

G. C. HOUSER.

ROLLER COPYING PRESS.

No. 553,240. Patented Jan. 21, 1896.

Fig. 1.

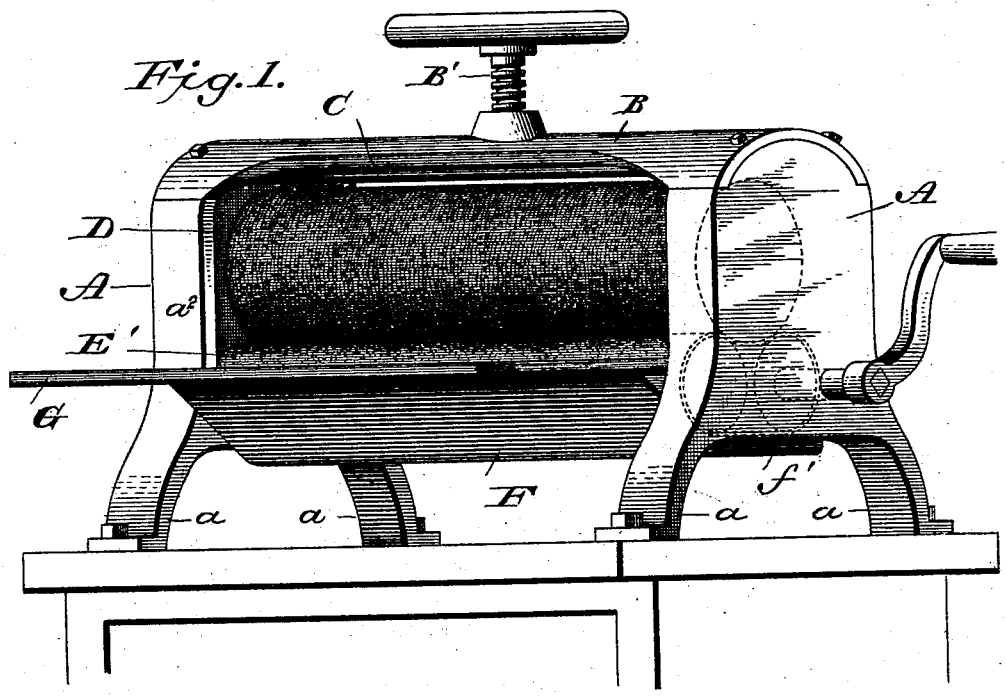

Fig. 3.

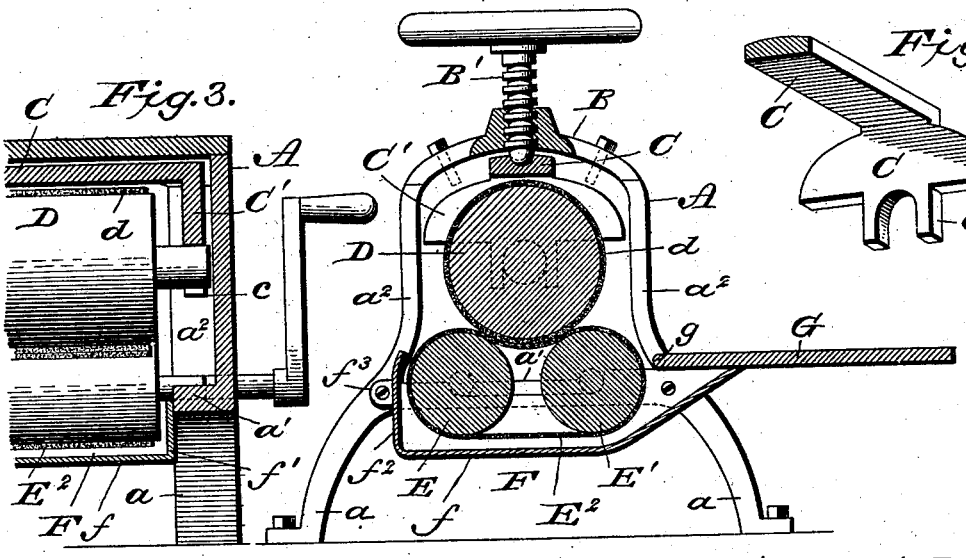

Fig. 4.

Fig. 2.

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WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE C. HOUSER, OF HAGERSTOWN, INDIANA.

ROLLER COPYING-PRESS.

SPECIFICATION forming part of Letters Patent No. 553,240, dated January 21, 1896.

Application filed September 12, 1895. Serial No. 562,302. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. HOUSER, a citizen of the United States of America, residing at Hagerstown, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Roller Copying-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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a roller copying-press in which the rollers are held in frictional contact with each other so that when one is turned the others will be turned therewith, a main adjustable roller being provided which is covered with a fabric and located above and between two rollers over which an endless belt passes, said belt entering a pan of water so that it will be moistened, the pan also serving to connect the lower ends of the side pieces of the press to each other and also forms a rest or support for a shelf which is attached to the side pieces of the press.

The invention consists in the specific construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claim.

In the accompanying drawings, forming part of this specifiation, Figure 1 is a perspective view of a roller copying-press constructed in accordance with my invention. Fig. 2 is a vertical sectional view. Fig. 3 is a detail sectional view, and Fig. 4 is a detail perspective view of one end of the presser-bar which adjusts the main roller.

A A designate the side pieces of the press, which are preferably castings formed so as to provide supporting-legs *a a*, which are adapted to be bolted or otherwise secured to a platform. The side pieces are also provided with a transverse web or flange a' and inwardly-projecting side flanges a^2, the transverse flanges being provided with recesses, which form bearings for the lower rollers. The upper ends of the side pieces are connected to each other by a plate B, which is provided centrally with a screw-threaded aperture through which a screw B′ passes, said screw having a hand-wheel at its upper end.

C designates the presser-bar, which is provided at its ends with depending portions C′ having extensions *c* providing bearings in which the ends of the upper roller, D, bear. The roller D is preferably made of metal and has the journals turned on the ends thereof. The surface of the roller is covered by a fabric *d* made up of felt with a rubber backing.

E and E′ designate the lower rollers, which are journaled in the recesses in the flanges a' of the side pieces A, a journal of one of the rollers passing through an opening therefor in one of the side pieces to receive an operating-handle. An endless belt E^2 passes over the rollers E and E′, and is composed of a facing of absorbent felt with a backing of rubber, the rubber giving it sufficient hold upon the rollers.

F designates a pan having a bottom *f*, with an upwardly-inclined front portion, side pieces f', and a rear wall f^2, the rear wall extending upwardly beyond the side pieces. The rear end of the pan is provided with projecting lugs f^3, through which pass screws for connecting said pan to the side pieces A of the press, the front end of the pan being also connected to the side pieces by screws, as shown in Fig. 2.

It will be observed that the pan and top plate B secure the side pieces A A of the press to each other so as to retain the rollers in position.

G designates a shelf, which is provided at its rear end with lugs *g*, which enter recesses in the side pieces A A to pivotally connect the shelf thereto. When the shelf is lowered to a horizontal position it will rest upon the front end of the pan, and when not in use it may be swung up so as to lie against the frame of the press to occupy but little space. Another object of having the shelf pivoted to the frame is that when it is swung up a space will be provided by which water can be poured into the pan.

When the parts have been assembled as shown and described and water placed in the pan and it is desired to use the copying-press, the handle is turned several times to thoroughly moisten the belt, the copying-paper—one or more sheets—is then placed upon the

shelf so that its inner end will engage the belt, and the letter or other matter to be copied is placed thereon. Now the handle is turned slowly, which turns the rollers and draws the papers between the roller D and endless belt E^2, the hand-wheel having been previously turned to insure proper pressure.

By forming the presser-bar C as herein shown and described a slight rocking movement will be permitted, which will insure the proper positioning of the roller D between the rollers E and E′.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a roller copying press, the combination with a frame consisting of side pieces A A connected at their upper ends by a cross-piece B having centrally a threaded aperture, the side pieces having inwardly-projecting side flanges a^2 and a transverse flange a', the latter being provided with recesses forming bearings; of a pan connected to the lower part of the side pieces; a movable cross-bar C having depending bearings c at its ends, and a screw B′ engaging the threaded aperture in the cross-piece so as to bear upon the cross-bar; together with a roller D journaled at its ends in the bearings c of the cross-bar; rollers E and E′ journaled in the recesses in the transverse flange a', and an endless belt passing over the rollers E and E′, said belt entering the pan F and engaging the roller D between the rollers E and E′, substantially as shown and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE C. HOUSER.

Witnesses:
ARCH HINDMAN,
JOHN BOWMAN.