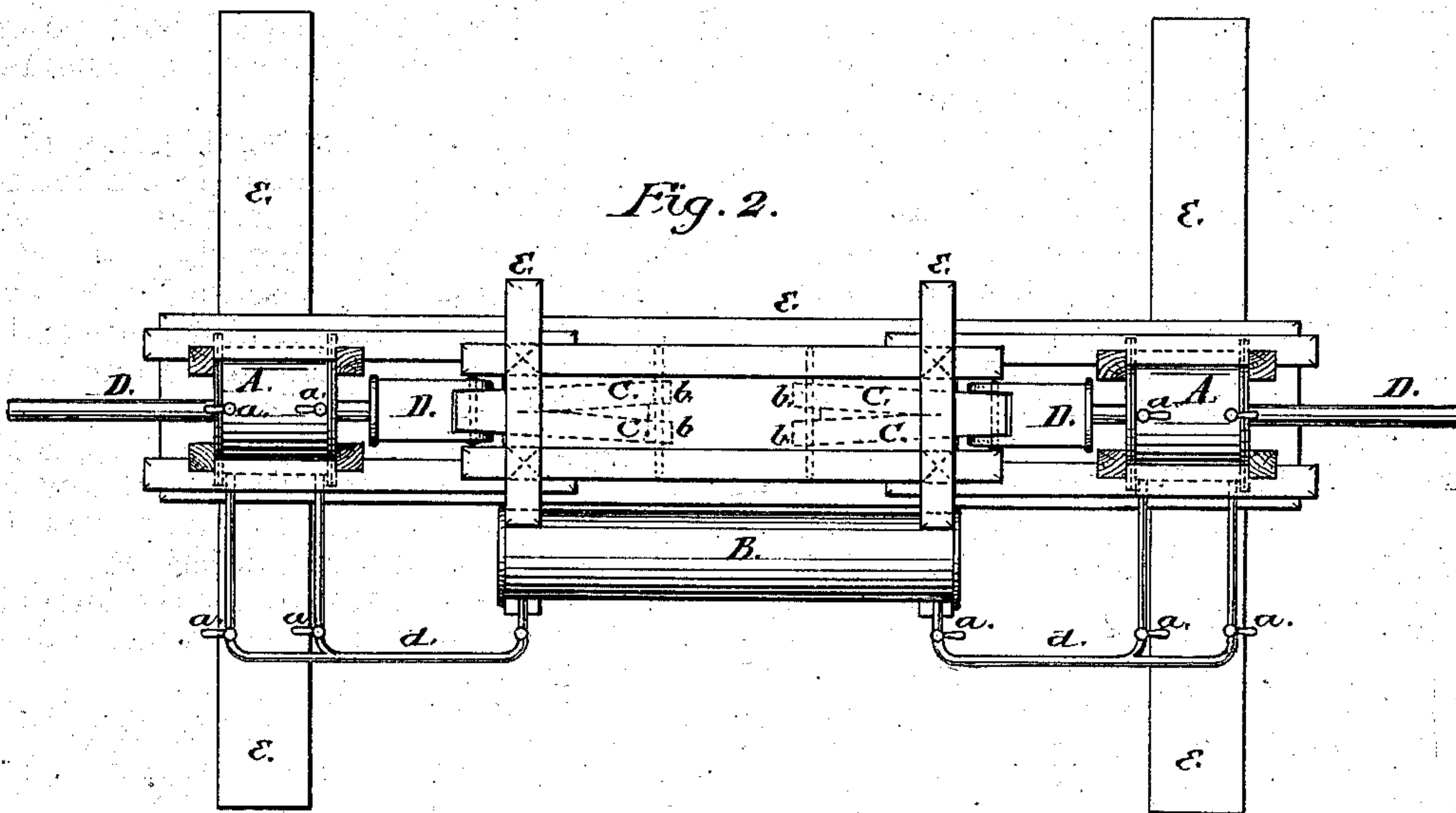
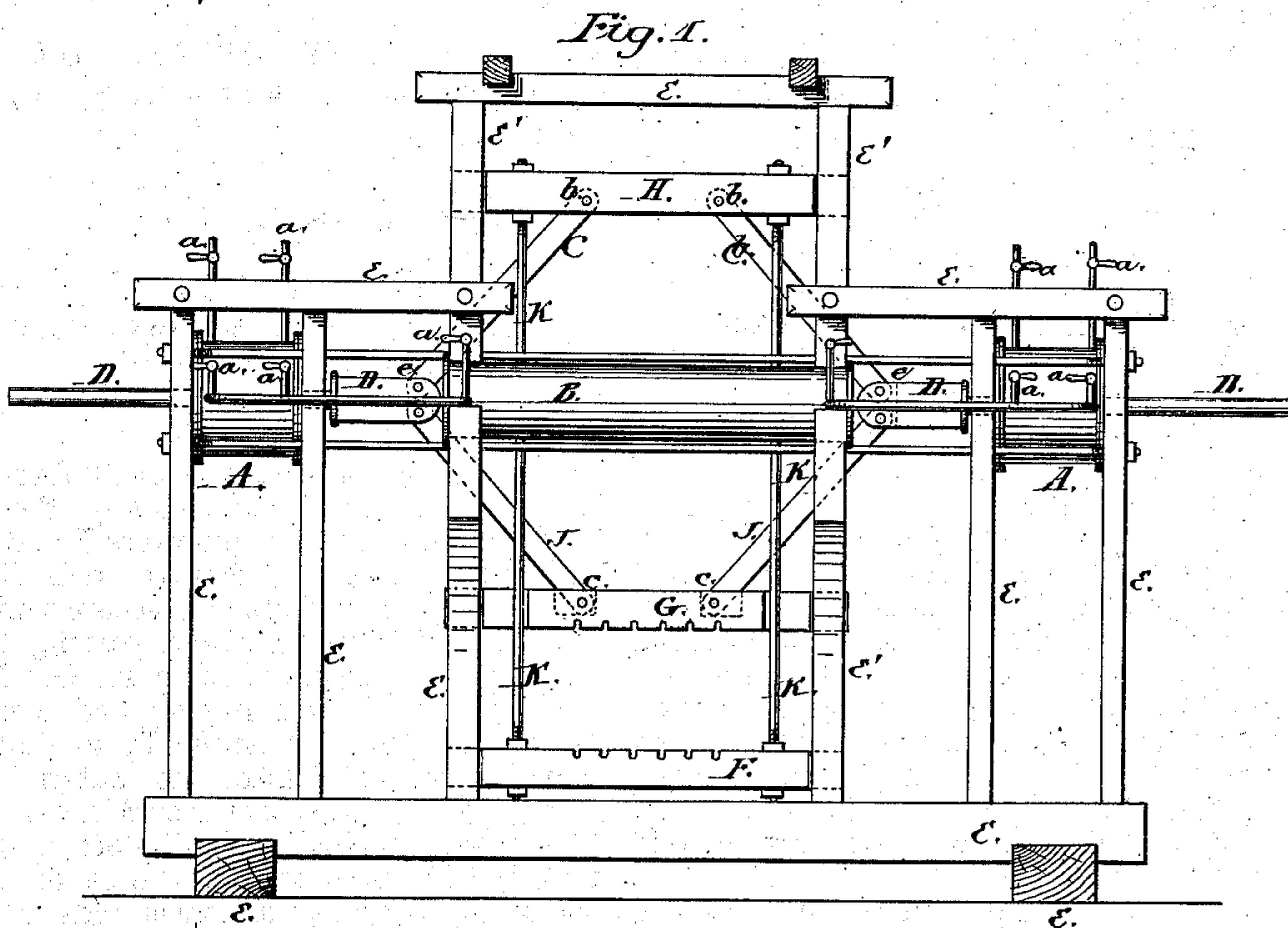


J. B. ROMANS, C. E. GREGORY & H. BOWEN.
Cotton-Presses.

No. 155,757.

Patented Oct. 6, 1874.



Witnesses:
Edw. W. Down
Frank B. Hoff

Inventor:
John B. Romans
Charles E. Gregory
Henry Bowen
By D. H. Glassie atty

UNITED STATES PATENT OFFICE.

JOHN B. ROMANS, CHARLES E. GREGORY, AND HENRY BOWEN, OF NASHVILLE, TENNESSEE; SAID ROMANS ASSIGNOR OF HIS RIGHT TO SAID GREGORY.

IMPROVEMENT IN COTTON-PRESSES.

Specification forming part of Letters Patent No. **155,757**, dated October 6, 1874; application filed September 10, 1874.

To all whom it may concern:

Be it known that we, JOHN B. ROMANS, CHARLES E. GREGORY, and HENRY BOWEN, of Nashville, in the county of Davidson and State of Tennessee, have invented certain new and useful Improvements in a Cotton-Compress; and we 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 it, reference being had to the accompanying drawings which form part of this specification.

Figure 1 is a front elevation of the compress complete. Fig. 2 is a plan of same.

Similar letters of reference indicate corresponding parts.

Our invention is designed to furnish an improved press for compressing and baling cotton and other materials that are handled in bales, which will work more effectually, and shall be simple in its construction and operation.

A is a steam-cylinder, substantially fixed in the frame-work E on either side of the press, in a horizontal position. These cylinders are connected with steam chest or reservoir B by pipes *d*, provided with stop-cocks *a*, through which the steam is conducted to the cylinders. This reservoir may be used or not, as is more convenient. The piston-rods D to cylinders A pass transversely into the center of the press-frame. In the guides of the frame E' work three followers, F G H, such as are usually used in cotton-presses. F and G have corrugations for the ropes or baling-straps. To the lower side of follower H are attached, by pivot-joints *b* at or near the four corners, four rods, C, the lower ends of which are pivoted in pairs to the piston-rods D; and to the upper side of follower G are attached, by pivot-joints at or near its four corners S, four rods, J, the upper ends of which are also piv-

oted in pairs to the piston-rods D, forming, as it were, a double knuckle-joint on the end of each piston-rod at *e*. Followers F and H are connected together by four iron rods, K, passing through and fastening securely in their four respective corners, and passing loosely through the corners of followers G. By aid of these rods, the pressure applied to follower H is conveyed to follower F, so that they move in concert. After the material to be compressed is placed between followers F and G, the steam is let into cylinders A, the piston-rods D move toward the center of the compress, carrying with them rods C and J, which approach to a vertical position as a toggle-joint to force the followers G and H apart; and, by the aid of rods K, forcing, with constantly-increasing power, followers F and G toward each other, so that both power and resistance will be employed to compress the material.

We are aware that toggle-joints, by ropes, cranks, and pulleys, ratchet-levers, and screws, to press the followers together, are no novelty; we do not, therefore, claim any of these.

Having thus fully described our device, so that those skilled may manufacture and use it, what we deem and esteem as our invention, and ask to protect by Letters Patent, is—

The combination of cylinders A, piston-rods D, lever-rods C J, followers F, G, and H, connecting-rods K, and the frame-work E, substantially as shown and described.

In testimony that we claim the foregoing we have hereunto set our hands this 6th day of August, 1874.

J. B. ROMANS.
C. E. GREGORY.
HENRY BOWEN.

Witnesses:

WM. REAR,
JNO. H. BOSKETTE,
WM. BOWEN.