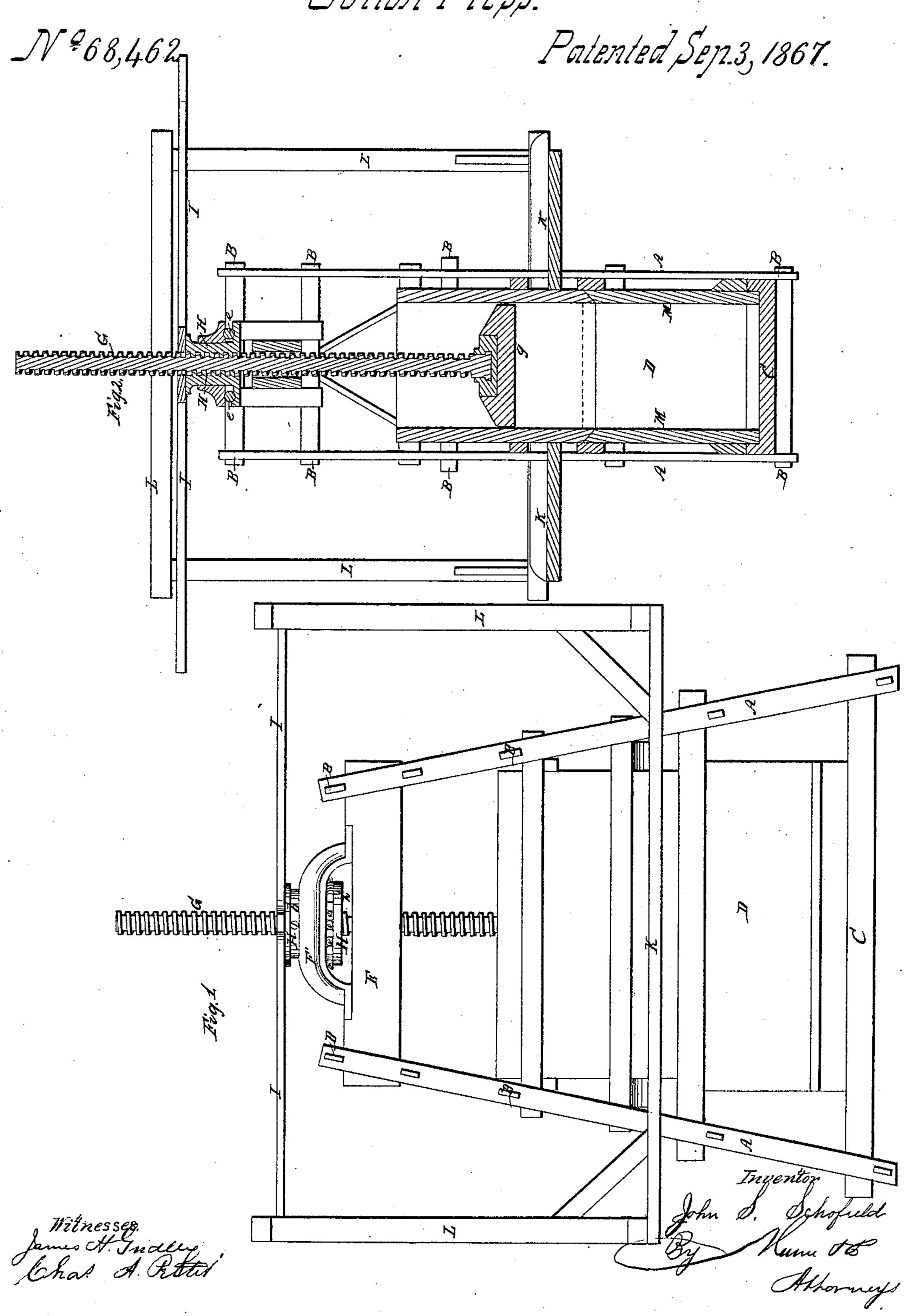
Schon Press.



## UNITED STATES PATENT OFFICE.

J. S. SCHOFIELD, OF MACON, GEORGIA.

## IMPROVED HAY AND COTTON PRESS.

Specification forming part of Letters Patent No. 68,462, dated September 3, 1867.

To all whom it may concern:

Be it known that I, John S. Schofield, of Macon, in the county of Bibb and State of Georgia, have invented a new and Improved Cotton and Hay Press; and do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a side elevation of my invention. Fig. 2 is a transverse section of the same.

Similar letters of reference indicate corre-

sponding parts in the two figures.

In this invention the arms which operate the screw do not rise and fall with the screw; secondly, the press can be worked upward and downward by hand, by horse-power, or

by any other power.

This invention is designed to obviate a difficulty in the working of the ordinary cotton-press arising from the fact that the arms by which the power is applied are fixed to the screw, and move up and down with it, rising and falling sometimes several feet, and proving a great inconvenience in operating the press.

In order that others skilled in the art to which my invention appertains may be enabled to make and use the same, I will proceed to

describe it in detail.

In the drawings, AAAA represent four upright posts of wrought iron, resting on the ground, and connected together by the crossbeams B B, forming the frame which supports the press. Firmly fixed to the lower crossbeams is a floor, C, upon which stands the tube or upright box D, in which the cotton or hay is subjected to pressure. Above the tube D is a stout beam, E, fastened at its ends to the cross-beams B B above and below it, to the middle of which is bolted the arched piece F, a stout brace or arched beam, of iron or other suitable metal, serving as a bearing for the apparatus, which incloses and operates the screw G. The screw G plays up and down in the tube D, having the plate g attached to the end that works in the tube, between which plate and the floor C the cotton is compressed. The apparatus by which the screw is worked consists of the stout ring or thimble H, having a collar, h, above and resting upon the piece F, and another collar, h', beneath the

piece F, and between it and the upper surface of the beam E. Friction balls or rollers e e e are placed on the upper side of the collar h', operating to diminish the friction between the collar and the under surface of the piece F. The apparatus is operated by power applied to the horizontal arms I I, which are firmly attached to it, carrying it with them in their revolutions.

The inside of the ring H is cut into screwthreads, into which the male threads of the screw G fit. By turning the ring H, therefore, the screw-shaft G will be forced up and down, while the arms I I will remain stationary. For the purpose of attaching the ring H to the instrument, I construct the ring in two parts—one the upper part, to which is fixed the collar h, and the other the under part, to which is fixed the collar h'. These parts can be put together so as to form the ring H, as seen in the drawings, in a variety of ways well known to every mechanic. I do not intend to limit myself to any one of them in particular. It is only necessary that the rings should be capable of being inserted separately into their bearings in the piece F, and then of being firmly attached together, so that one part of the ring H thus formed will not move without a corresponding motion of the other part. It may be effected by bolting them together, or, as I have generally done it, by making one piece with a square or horizontal aperture fitting closely down over the other piece, which is formed to fit into said aperture, and then keying or bolting them together.

K K is a platform extending around the tube D, and having firmly fixed to its ends the strong frame L L, secured by braces, and

rising somewhat above the arms I I.

M is the door through which the cotton, hay, or other substance that is pressed is re-

moved after compression.

A press constructed in this manner can be placed on the ground, so as to rest upon the posts A A, and used as a hand-press, compressing the cotton downward; or it may be inverted and rested on the frame L L, in which case the press will operate upward, and horse-power can more easily be attached. It is compact and simple, consisting of few parts, every one of which is durable and cheaply constructed. Such a press may be taken into

the gin-house, and used there without any inconvenience whatever.

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

A hay or cotton press constructed as above described, and having the screw G, arms II, ring H, box D, platform K, and frames A and L, all combined and arranged in connection

with each other to form a press, which may rest, in working, either on the frame A or in an inverted position on the frame L, substantially as and for the purpose described.

J. S. SCHOFIELD.

Witnesses:

M. M. HALL, E. C. GRANNISS.