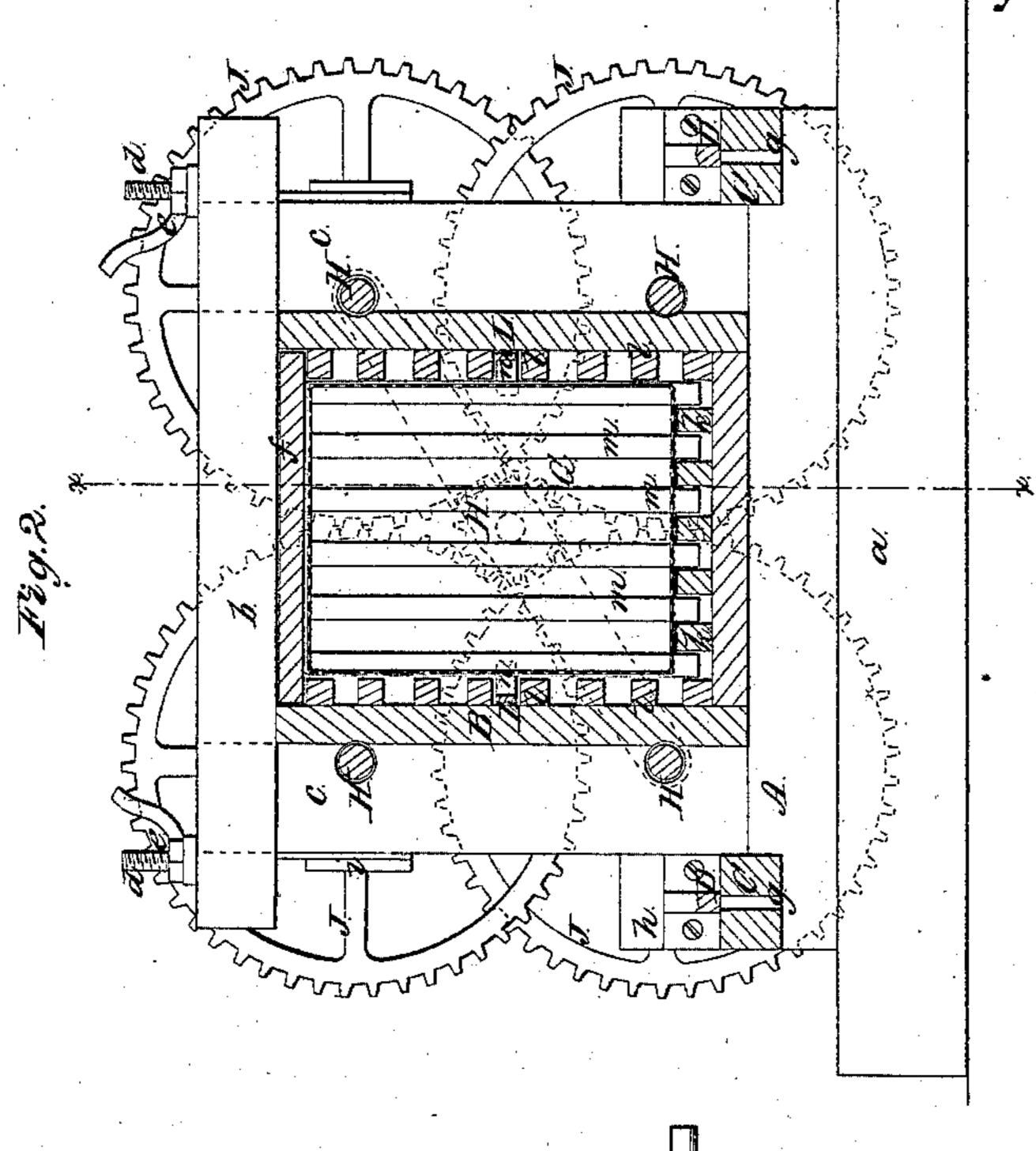
## Huddleston & Harrison.

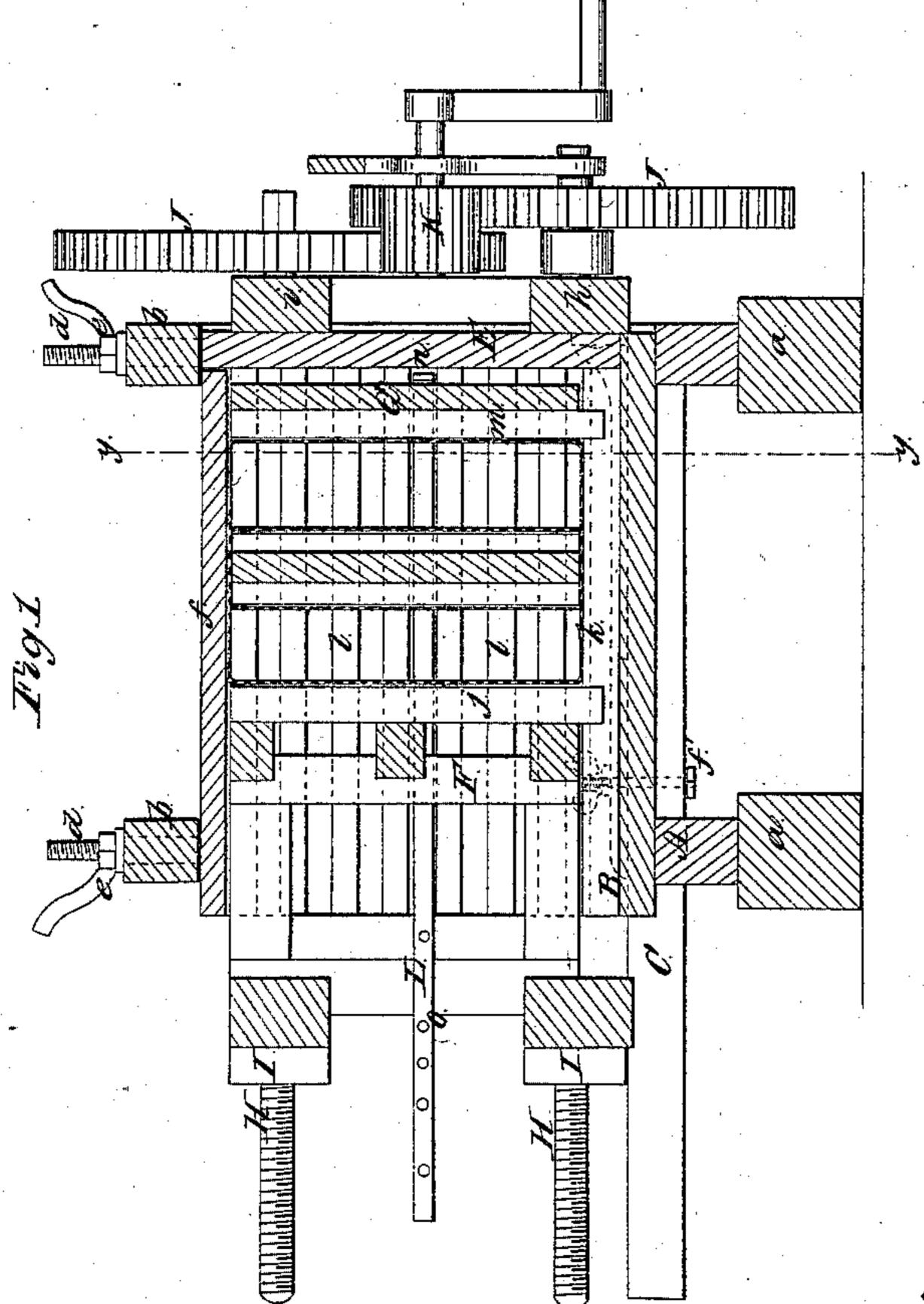
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N°31,979.

Witnesses.

Patented A77.9, 1861.





Eli Huddliston 19 m Harrison Joer Mundle attorneys

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

## United States Patent Office.

E. HUDDLESTON, OF LAWRENCE, KANSAS, AND B. M. HARRISON, OF TERRE HAUTE, INDIANA.

## IMPROVEMENT IN PRESSES.

Specification forming part of Letters Patent No. 31,979, dated April 9, 1861.

To all whom it may concern:

Be it known that we, ELI HUDDLESTON, of Lawrence, in the county of Douglas and Territory of Kansas, and B. M. Harrison, of Terre Haute, in the county of Vigo and State of Indiana, have invented a new Improved Press for Compressing Articles for Baling and other Purposes; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side sectional view of our invention, taken in the line x x, Fig. 2; Fig. 2, a transverse vertical section of the same, taken

in the line y y, Fig. 1.

Similar letters of reference indicate corre-

sponding parts in the two figures.

The object of this invention is to obtain a very simple and powerful press for general | purposes, and one that will not monopolize much space, and may be manipulated by any one of ordinary ability.

To enable those skilled in the art to fully understand and construct our invention, we

will proceed to describe it.

A represents a strong rectangular framing, which may be secured to two heavy parallel sill-pieces, a a; and B is a rectangular box, which may be constructed of heavy planks

and fitted within said framing.

On the upper part of the framing A there are two transverse bars, b b, which are fitted on tenons or uprights c of the framing. These bars b b have screw-rods d passing through them, said rods being secured to the uprights c, and having nuts e on their upper ends above the bars b b. The top f of the box B is a slide, which is secured firmly in proper position on box B by screwing down the nuts e and thereby forcing the bars bb down upon it.

each side of the box B there is placed a beam, C. These beams are parallel with each other, and the box B and the beams C are placed transversely with the sill-pieces a a. On each beam C there is placed a metal bar, D, said bars being secured to the beams by screwbolts f', which pass through longitudinal slots g in the beams C. To the outer ends of the bars D the lower cross-piece, h, of the head E

of the box B is secured the upper cross-piece, i, of said head, being fitted in shallow recesses in the front uprights, c, of the framing.

On the back part of the beams C C the follower F of the press rests and is allowed to slide freely. This follower is constructed of a heavy substantial framing, and at its inner or face side there are secured vertical slats j.

The bottom of the box B is provided with longitudinal slats k, placed at a suitable distance apart, and the sides of the box are provided with similar slats, l. Within the box, at its head, there is placed a board, G, which has vertical slats m attached, which slats extend down between the slats k on the bottom of the box. The slats j of the follower F extend down between the slats j a distance about half their depth.

HHH H are four screw-rods, which pass through nuts I at each corner of the follower. These screw-rods pass through the uprights c, and the upper screw-rods pass through the upper cross-piece, i, of the head E of the box B, while the lower screw-rods pass through the lower cross-piece, h, of the head E. On the front end of each screw-rod there is a toothed wheel, J, and these wheels all gear into a cen-

tral pinion, K.

L L are two parallel bars, which extend within the box B, are hooked at their inner ends, as shown at n, said hooks catching behind the slatted board G. The bars L extend outward at each side of the follower F, and they are connected at their outer parts by a rod, o, which may pass through either of a series of holes in said bars. The bars L fit between two of the slats l at the inner sides of the box, said slats forming guides for them.

The operation is as follows: The article to be compressed is placed within the box B, the follower F being run back and the lid or top On the lower part of the framing A and at |f| of the box removed by unscrewing the nuts e and shoving out the top. When the box is filled, the lid or top is replaced and secured in proper position by screwing down the nuts e. The central pinion, K, is then turned by any convenient power from left to right, and the screw-rods H draw in the follower F, the latter moving in a plane at all times parallel with the head E, in consequence of a screw-rod passing through each corner of the follower. When

the article is sufficiently compressed, the screwrods are turned in a direction reverse to their
former movement and the follower is run back,
the bars L L drawing the compressed material
with it and causing the material to be discharged automatically. The head E is retained in position by collars on the front ends
of the screw-rods and the bars D. The slats  $k \ l \ j \ m$  admit the escape of any moisture or
fluid that the article under the act of compression may retain, and this fluid may pass
out at the back end of the box B and fall into
any proper receptacle prepared to receive it.

We are aware that the screw is an old device and has been commonly used in presses. We therefore do not claim, broadly, and in the abstract such device; but

We do claim as new and desire to secure by Letters Patent—

The particular arrangement of the follower F, screws H H H H, gearing J J K K, and rods L L with the box A, top f, screws d d d d, bars b b, nuts e, head E, and bars D, as and for the purposes herein shown and described.

ELI HUDDLESTON.
B. M. HARRISON.

Witnesses for Eli Huddleston:
SKARLET M. REYNOLDS,
P. H. BERKAN.
Witnesses for B. M. Harrison:
LAMBERT DEVY,
GEO. C. DEVY.