# E. P. & J. E. DAVIS & J. FISK.

## CORN-STALK PRESS.

No. 189,925. Patented April 24, 1877.

*Fig. 1.*

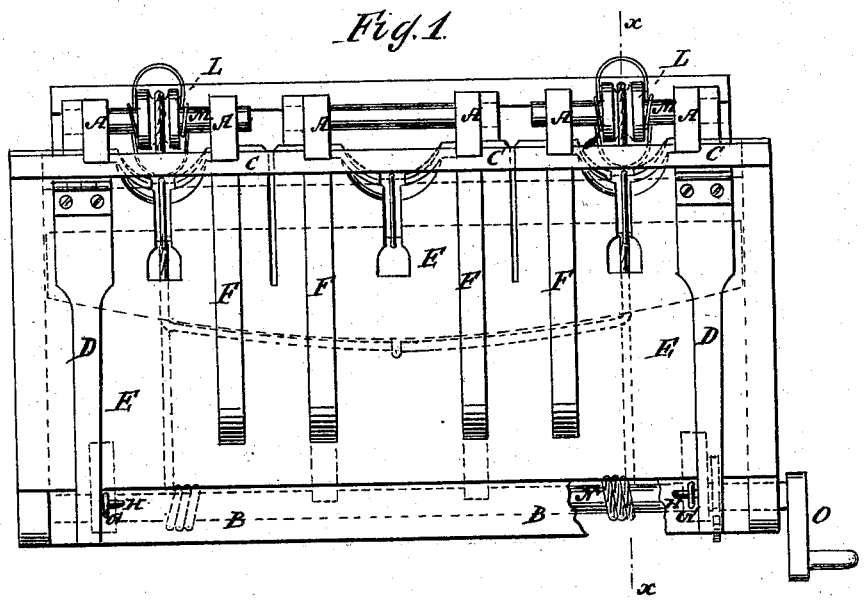



*Fig. 3.*

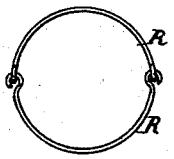



*Fig. 4.*

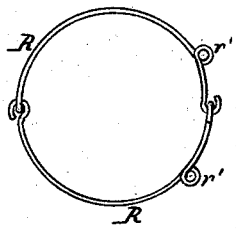
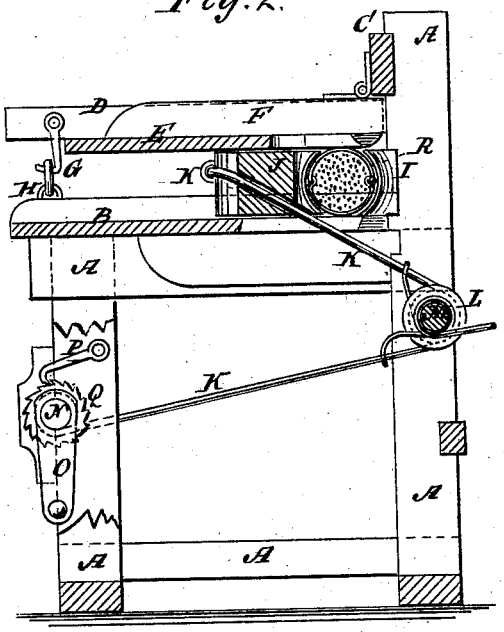



*Fig. 2.*

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# UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN CORN-STALK PRESSES.

Specification forming part of Letters Patent No. **189,925**, dated April 24, 1877; application filed March 12, 1877.

*To all whom it may concern:*

Be it known that we, EDGAR PULASKI DAVIS, JAMES EATON DAVIS, and JOHN FISK, of Crete, in the county of Saline and State of Nebraska, have invented a new and useful Improvement in Machines for Pressing Corn-Stalks, &c., for Fuel, of which the following is a specification:

In the accompanying drawing, Figure 1 is a top view of our improved machine. Fig. 2 is a vertical cross-section of the same taken through the line *x x*, Fig. 1. Fig. 3 is a detail view of one of the bands. Fig. 4 shows a modification of the band.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for pressing corn-stalks, weeds, hay, brush, &c., into small bundles for fuel, which shall be simple in construction, convenient in use, and effective in operation, pressing the material compactly, and holding it securely until bound.

In the drawing, A is the frame of the machine, to the top of which is attached the table or platform B. The rear posts of the frame A project above the table B, and to their forward or inner side is attached a bar, C, to which are hinged the rear ends of the arms D. To the arms D are attached the boards E that form the cover of the press, and which are strengthened by arms F attached to them. The arms D are so hinged to the cross-bar C that when the cover D E F is shut down, the rear ends of the arms D F may pass in beneath and be supported by the said bar C. To the forward ends of the arms D are pivoted hooks G, to hook into the rings of ring-bolts H, attached to the table B, to hold the cover D E F down to its place while the material is being compressed between it and the said table B. To the inner or forward sides of the upwardly-projecting parts of the rear posts of the frame A, between the table B and the cover D E F, is attached a bar, I, the inner side of which is concaved longitudinally to give a rounded form to the bundles. J is the follower, which slides upon the table B and fits into the space between the said table B and the cover D E F. The forward side of the follower J is concaved longitudinally, to give a rounded form to the bundles. The follower J is drawn forward to compress the material by the rope K, which passes along the middle part of its outer side through downwardly-inclined holes in its end parts, through slots in the table B, around pulleys L attached to the short shaft M, pivoted to the rear posts of the frame A, and its ends are attached to the shaft N pivoted to the front posts of the frame A. To one end of the shaft N is attached the crank O, by which it is turned. The shaft N is held in any position into which it may be turned by a pawl, P, pivoted to the frame A, and which engages with the teeth of a ratchet-wheel, Q, attached to the said shaft N.

The cover D E F, the follower J, and the table B, have holes formed through them, and are slotted from said holes to their rear edges, so that bands R may be put around the bundles, and fastened, while the said bundles are still under pressure. For the same reason the bar I is slotted transversely in line with the slots of the table B, the follower J, and the cover D E F. The bands R are formed of two semi-ring pieces of wire, connected together at one end by eyes, and having hooks formed upon their other ends, so that they may be readily hooked together after being passed around the bundles. Midway between the slots of the table B, follower J, cover D E F, and bar I, are formed slots of sufficient width to receive a saw, so that the long bundle formed by the machine may be cut into a number of short bundles, their length depending upon the length of the stove in which the fuel is to be burned.

With this construction, one person can be sawing the bundles into lengths while another is passing the bands R around them. With this machine hay, straw, weeds, brush, and especially corn-stalks, can be easily put into such a shape as to form a most excellent fuel, which, in a region where wood and coal are scarce and dear, is a matter of great importance. The bands R should be taken out of the stove with a hook before fresh fuel is put into it, and can be used over and over again until worn out.

The bands R may be made adjustable by coiling the wire near its ends, to form eyes *r'*,

into which the hooked ends of said wire may be hooked.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination of the table B, the cover D E F, bar I, follower J, rope K, guide-pulleys L, and crank-shaft N, with each other and the frame A, substantially as herein shown and described.

2. A fuel formed of corn-stalks and similar material, pressed into bundles of suitable size to enter a stove, and bound with wire bands, substantially as herein shown and described.

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