N. ALDRICH.
Fuel-Press.

No. 199,394. Patented Jan. 22, 1878.

Fig. 1

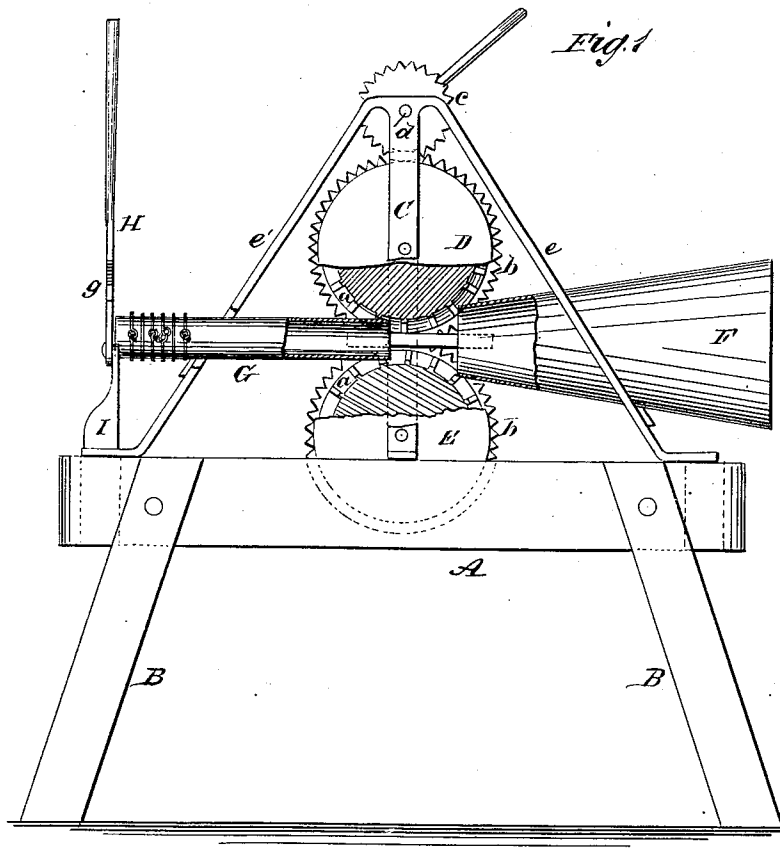
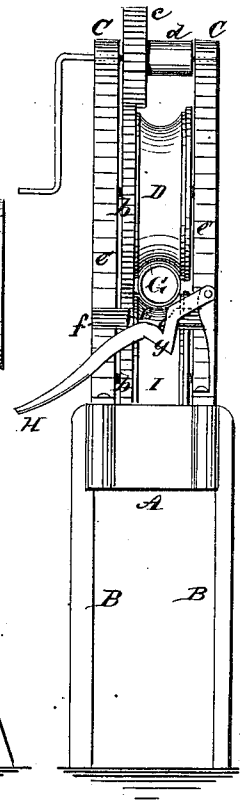



Fig. 2.




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# UNITED STATES PATENT OFFICE.

NATHAN ALDRICH, OF ALDEN, IOWA.

## IMPROVEMENT IN FUEL-PRESSES.

Specification forming part of Letters Patent No. 199,394, dated January 22, 1878; application filed January 3, 1878.

*To all whom it may concern:*

Be it known that I, NATHAN ALDRICH, of Alden, county of Hardin, and State of Iowa, have invented a new and Improved Fuel-Press, of which the following is a specification:

Figure 1 is a side elevation of my improved fuel-press, with parts broken away to more clearly show the construction. Fig. 2 is an end elevation, looking toward the discharge end.

Similar letters of reference indicate corresponding parts.

My invention relates to the class of machines that are employed in compressing straw, corn-stalks, and other similar materials for fuel; and it consists in the combination of a feeding-funnel, a pair of ribbed compressing-rolls, a discharge-pipe, and a knife for detaching the bales or bundles after they are compressed.

The working parts of the machine are mounted upon a strong frame, A, which is supported by legs B. Vertical standards C are secured to the sides of the frame, and in the said standards are journaled two rollers, D E, each having a concave face, which is provided with transverse ribs *a*. To these rollers spur-wheels *b* are secured, which mesh together and cause the rolls to roll together. A pinion, *c*, mounted on the shaft *d*, journaled in the upper portion of the standards C, meshes into the upper spur-wheel *b*.

In front of the rolls D E a funnel, F, is supported by braces *e*, that run from the top of the standards C to the front end of the frame A. This funnel is of large diameter at its outer or receiving end, and the end which delivers the fuel to the rollers is somewhat larger in diameter than the circle formed by the adjoining concave faces of the two rollers.

Upon the rear or delivery side of the rolls D E a tube, G, is supported by braces *e'*, that extend from the top of the standards C to the ends of the frame A, and also by connection with the funnel F by means of straps *f*.

A lever, H, carrying the triangular knife *g*, is pivoted to a standard, I, that is secured to the rear of the machine, and is used for cutting the compressed material, as it emerges from the tube G, into lengths convenient for use.

Power is applied to the shaft *d* in any convenient way, and a number of wire bands are slipped over the rearwardly-projecting end of the tube G. Straw, corn-stalks, or other material to be pressed is supplied to the funnel F, from which it is taken by the rolls and compressed, and forced through the tube G. As it emerges from said tube the wire bands are slipped from the tube to the bundle, and when the bundle is of sufficient length it is cut off by bringing down the lever H.

The operation of the machine is continuous and rapid, and the compressed material is delivered in convenient form for handling or use.

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

1. The combination, in a fuel-press, of two concave rolls, a feeding-funnel, and discharge-tube, substantially as herein shown and described.

2. The combination of the lever carrying the triangular knife with the discharge-tube of a fuel-press, substantially as shown and described.

NATHAN ALDRICH.

Witnesses:
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