

H. A. HOUSE.
Wood-Compressors.

No. 143,243.

Patented September 30, 1873.

Fig 1

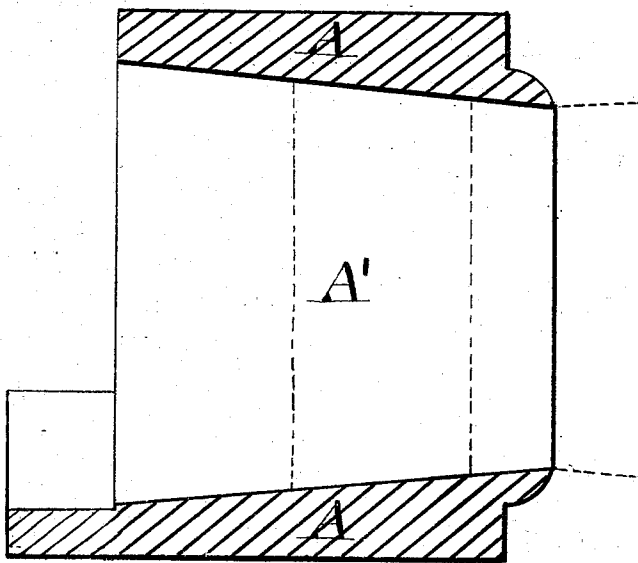
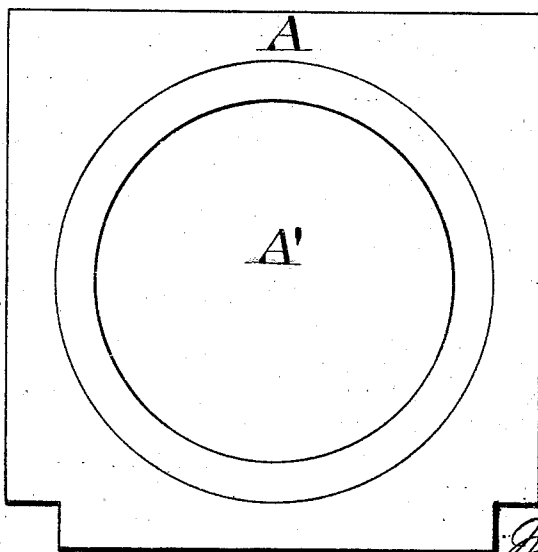


Fig. 2



Witnesses
R. Campbell
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UNITED STATES PATENT OFFICE.

HENRY A. HOUSE, OF BRIDGEPORT, CONNECTICUT.

IMPROVEMENT IN WOOD-COMPRESSORS.

Specification forming part of Letters Patent No. **143,243**, dated September 30, 1873; application filed December 6, 1872.

CASE D.

To all whom it may concern:

Be it known that I, HENRY A. HOUSE, of Bridgeport, in the county of Fairfield and State of Connecticut, have invented an Improvement in Preparing Kindling-Wood and other Substances for Bundling; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a central longitudinal section through my compressor. Fig. 2 is an end view of the same.

Similar letters of reference indicate corresponding parts in both figures.

The object of this invention is to compress kindling-wood and other substances preparatory to applying bands or cords around the same, so that when the bundles are allowed to expand by freeing them from the compression they will be very tightly bound, as will be hereinafter explained.

Prior to the invention which I shall hereinafter explain kindling-wood has been pushed through a tube, which consisted of two right cylinders, connected by an annular beveled shoulder, which allows the wood to be forced from a larger cylinder into and through a smaller cylinder, thus holding the charges of wood in a condition for applying bands around them. Such a contrivance does not tightly compress the bundles, and is only designed for conveniently holding them in uniform quantities to be bound.

The following description will enable others skilled in the art to understand my compressor.

Through this device I form a chamber, A', which is tapered from end to end, and which does not present an abrupt shoulder or other obstruction. The length of the chamber A is such that when it is once filled the introduction into it thereafter of a charge will properly expose beyond its smallest end a portion of a charge to be bound—for instance, the chamber A' may be equal in length to the length of two

charges and a half, as shown in Fig. 1. The diameter of the largest end of the chamber A' is about equal to the amount of material which it is desired to compress into a bundle, and the smallest end of this chamber is equal in diameter to the degree of compression which it is desired to give a bundle in order to bind it, and have it properly tight after it is allowed to expand.

I do not claim under this petition means for binding the bundles, nor means for pressing them into and through the tapered chamber; but I prefer to employ for such purposes the devices described in my applications for Letters Patent marked, respectively, Cases B and C, and bearing even date with the filing of this.

It will be seen from the above description that the tapered chamber A' will gradually compress the material from circumference to center as it is moved from the feed to the discharge end of this chamber. This compression is continuous throughout the length of the chamber; consequently the pressing device and its operating parts will not be subjected to sudden and injurious shock, which they would receive in the double cylindrical tube to which I have above referred.

By constructing the chamber A' with a considerable degree of taper, as shown in Fig. 1, I do not have to employ cutters at its feeding end for trimming and rounding the charges, as they are comparatively loose at first, after which they are compressed, as above described.

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

The compressing chamber A', presenting a taper which is uninterrupted from one end to the other, as herein shown and described.

HENRY A. HOUSE.

Witnesses:

J. N. CAMPBELL,
JAMES MARTIN, Jr.