

(Specimens.)

D. HEER.

MACHINE FOR MAKING TASSEL BLANKS.

No. 292,010.

Patented Jan. 15, 1884.

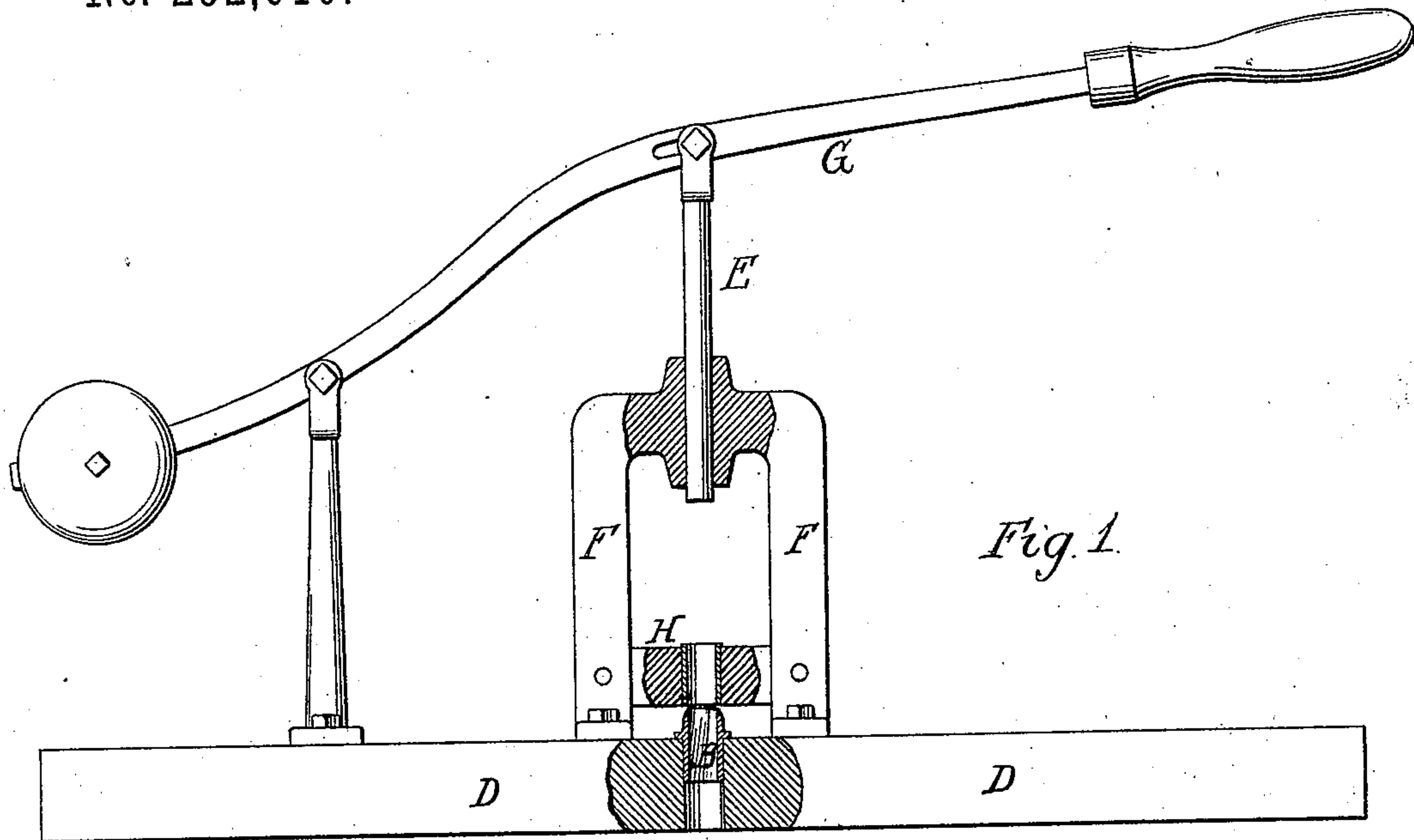
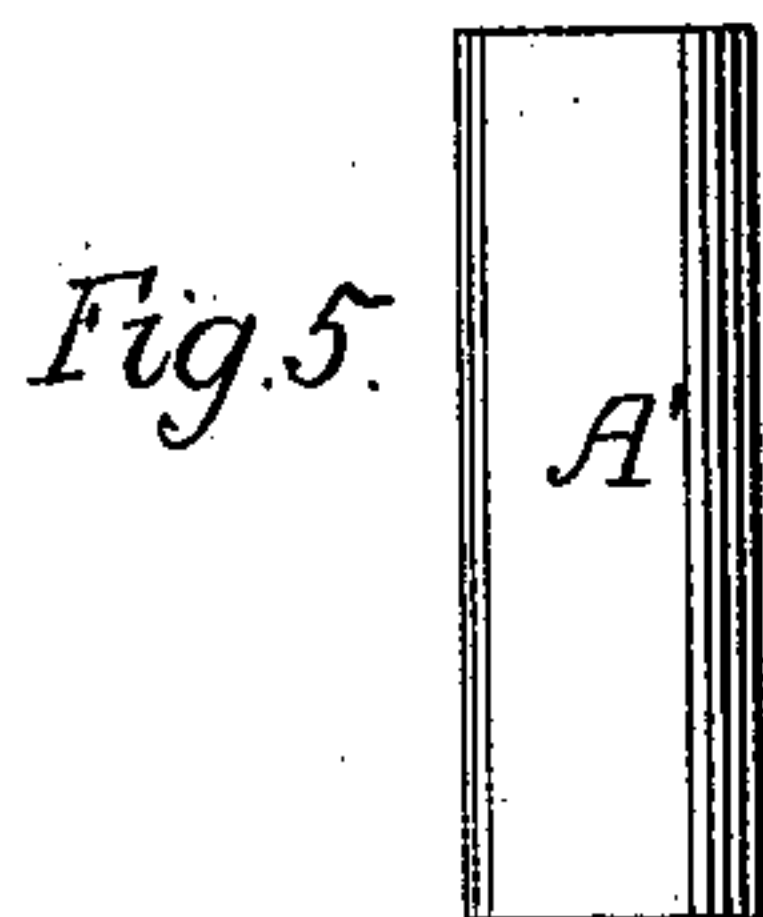
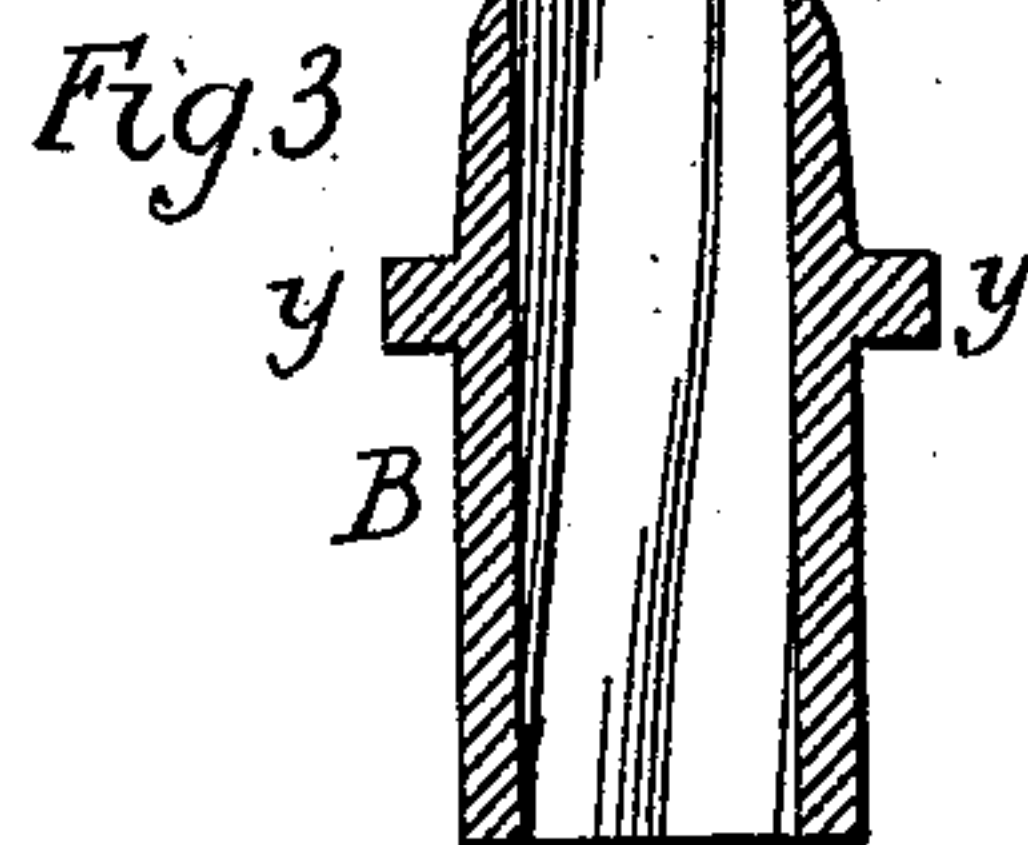
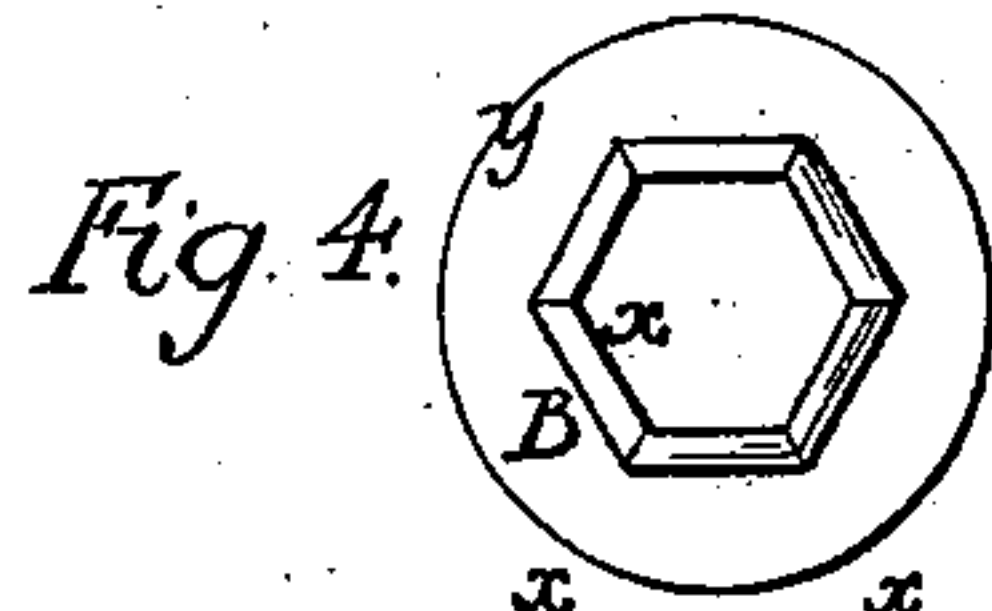
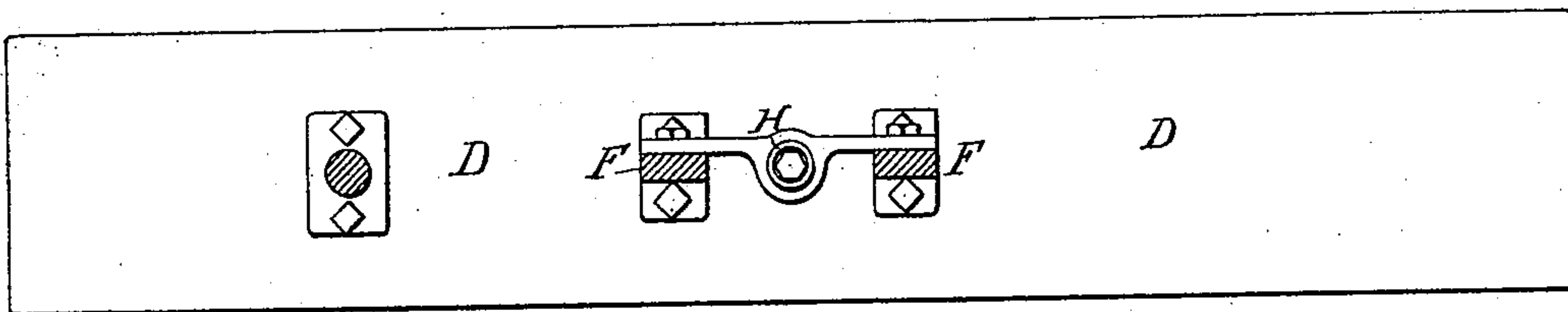
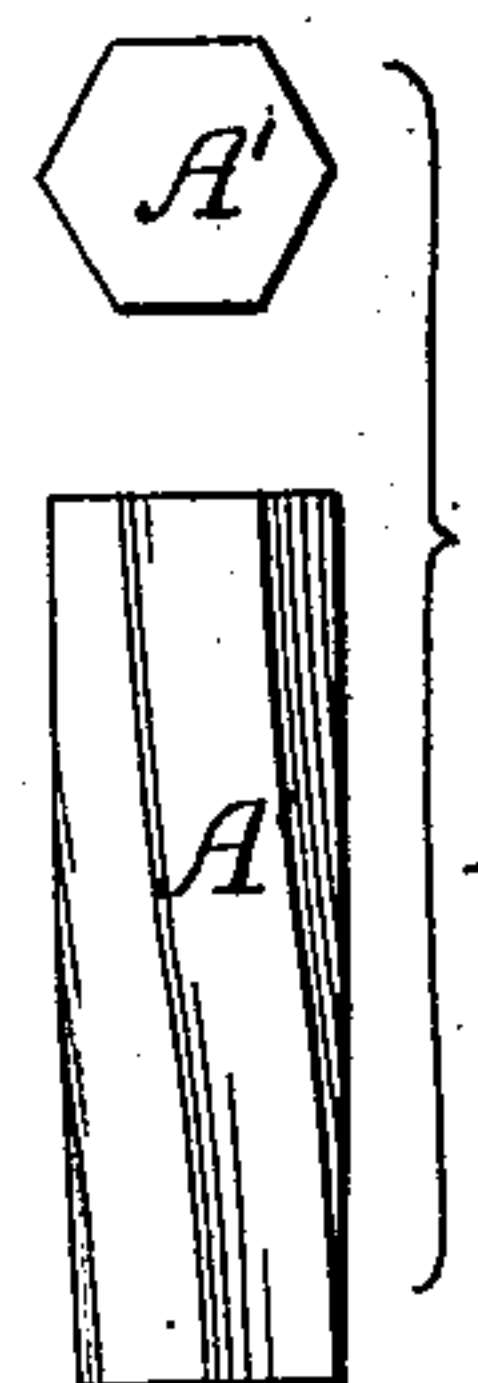


Fig. 1.

Fig. 2.



Witnesses  
Jas. L. Skidmore  
Harry Smith



Inventor  
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# UNITED STATES PATENT OFFICE.

DAVID HEER, OF PHILADELPHIA, PENNSYLVANIA.

## MACHINE FOR MAKING TASSEL-BLANKS.

SPECIFICATION forming part of Letters Patent No. 292,010, dated January 15, 1884.

Application filed August 20, 1883. (Specimens.)

*To all whom it may concern:*

Be it known that I, DAVID HEER, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain  
5 Improvements in Machines for Making Tassel-Blanks, &c., of which the following is a specification.

My invention relates to devices for forming wooden blocks having spiral sides or ribs,  
10 these blocks being intended, principally, for tassel-blanks, which, after being wrapped with silk or other yarn, form parts of upholstery or other trimmings.

The main feature of my invention consists  
15 of a tubular cutter through which crude blanks of wood may be pushed and converted into finished blanks, substantially as described hereinafter.

In the accompanying drawings, Figure 1 is  
20 a side view, partly in section, of a machine of which the cutting-die forms a part; Fig. 2, a sectional plan of Fig. 1; Fig. 3, a section of the tubular cutter; Fig. 4, an end view of the same, showing the cutting-edge; and Figs. 5  
25 and 6, views of the crude and finished blanks.

It should be understood in the outset that the finished blank shown in Fig. 6 is given as one example only of the product of my invention. In the present instance this blank  
30 when viewed endwise is hexagonal, and when bisected at any point throughout its length presents a hexagonal figure, each of the six sides of the blank being spiral. The blank may be triangular, quadrangular, and of other  
35 forms; but in all cases there must be spiral sides, or whatever ribs or grooves there may be on the blank must be spirally arranged from end to end.

The finished blank A, Fig. 6, is formed by  
40 pushing a crude blank, A', Fig. 5, consisting of a cylinder of wood through a tubular cutter, B, which is spirally grooved or rifled internally to correspond with the said finished blank, the cutter terminating at one end in a  
45 sharp cutting-edge,  $\alpha$ , which coincides in shape and dimensions with the bore of the cutter. On pushing the crude blank A' into and through the cutter it will be reduced by the cutting-edge of the same to the desired

hexagonal shape, and at the same time will  
pursue the spiral course determined by the  
rifled bore of the cutter.

The cutter, which is fitted into an orifice in the plate D, as shown in Fig. 1, has a collar,  
y, for bearing on the plate; and above and in  
55 line with the cutter is a plunger, E, guided in a standard, F, secured to the said plate, the plunger being connected to the long arm of a lever, G, the weighted short arm of which  
tends to retain the plunger in an elevated po-  
60 sition.

Between the cutter and the lower end of the plunger is a guide, H, having a central opening of a proper size to admit and guide  
the crude blank A', which, after being ad-  
65 justed to the said opening, is forced through the same, through the cutter, and through the opening in the plate. The lower end of the plunger should be smooth, for the blank must necessarily turn to a limited extent as  
70 it is being reduced to the desired shape.

It will be understood that whatever may be the number or character of the internal spiral grooves of the cutter, the cutting-edge must  
in all cases correspond and coincide with  
75 them; or, in other words, the cutting-edge  $\alpha$  must coincide with the rifled bore of the cutter.

I am aware that spirally-fluted circular blocks are common, the grooves being formed  
80 in the revolving block by traversing gouge-like cutters; and also that straight blocks of polygonal cross-section, and having a number of flat sides, have been made by forcing a blank through a plain cutter of the proper  
85 outline; and hence I claim neither of these things. The block or strip which I produce is of the same character as the last of the above, with the additional feature, however,  
of the spiral twist due to the spiral grooves  
90 of the cutter.

I claim as my invention—

1. The within-described cutter, the same consisting of a tube having internal spiral grooves, and terminating at one end in a cut-  
95 ting-edge coinciding with the bore of the tube, substantially as set forth.

2. The combination of the internally and



spirally grooved cutter, with the guide H, the guided plunger E, and mechanism for operating the said plunger, substantially as specified.

3. As a new article of manufacture, the within-described block or strip, having throughout a uniform polygonal cross-section, and having flat sides with a longitudinal twist, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID HEER.

Witnesses:

HARRY L. ASHENFELTER,  
HARRY SMITH.