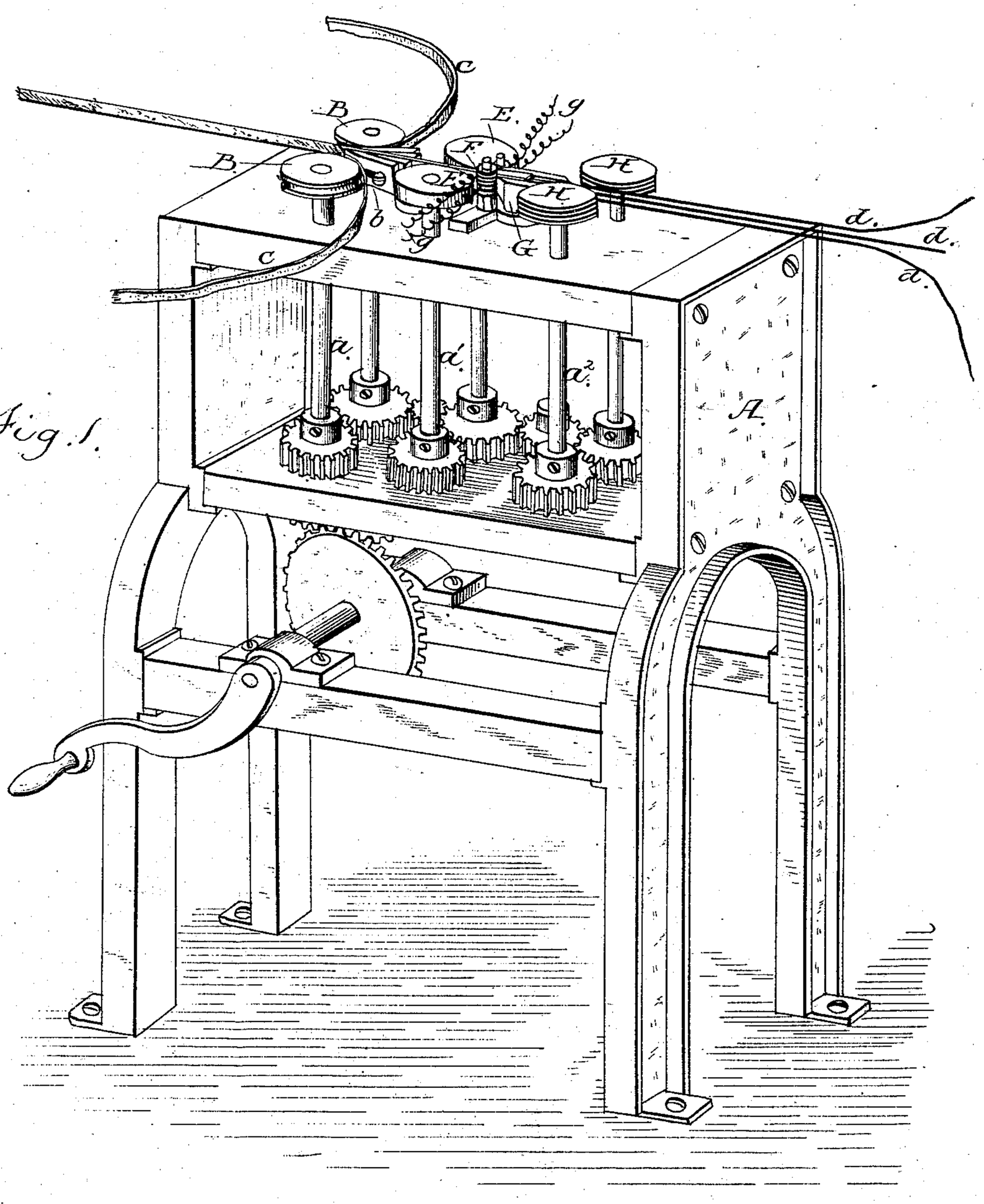
(No Model.) 2 Sheets—Sheet 1.

N. H. RICHARDSON.

Machine for Working Rattan.

No. 237,206. **Patented Feb. 1, 1881.**

Fig. 1.



Attest:

J. Walter Fowler

Jno. L. Condron.

Inventor:

Nathan H. Richardson

per attys

A. H. Evans & Co

(No Model.) 2 Sheets—Sheet 2.

N. H. RICHARDSON.

Machine for Working Rattan.

No. 237,206. **Patented Feb. 1, 1881.**

Fig. 2.

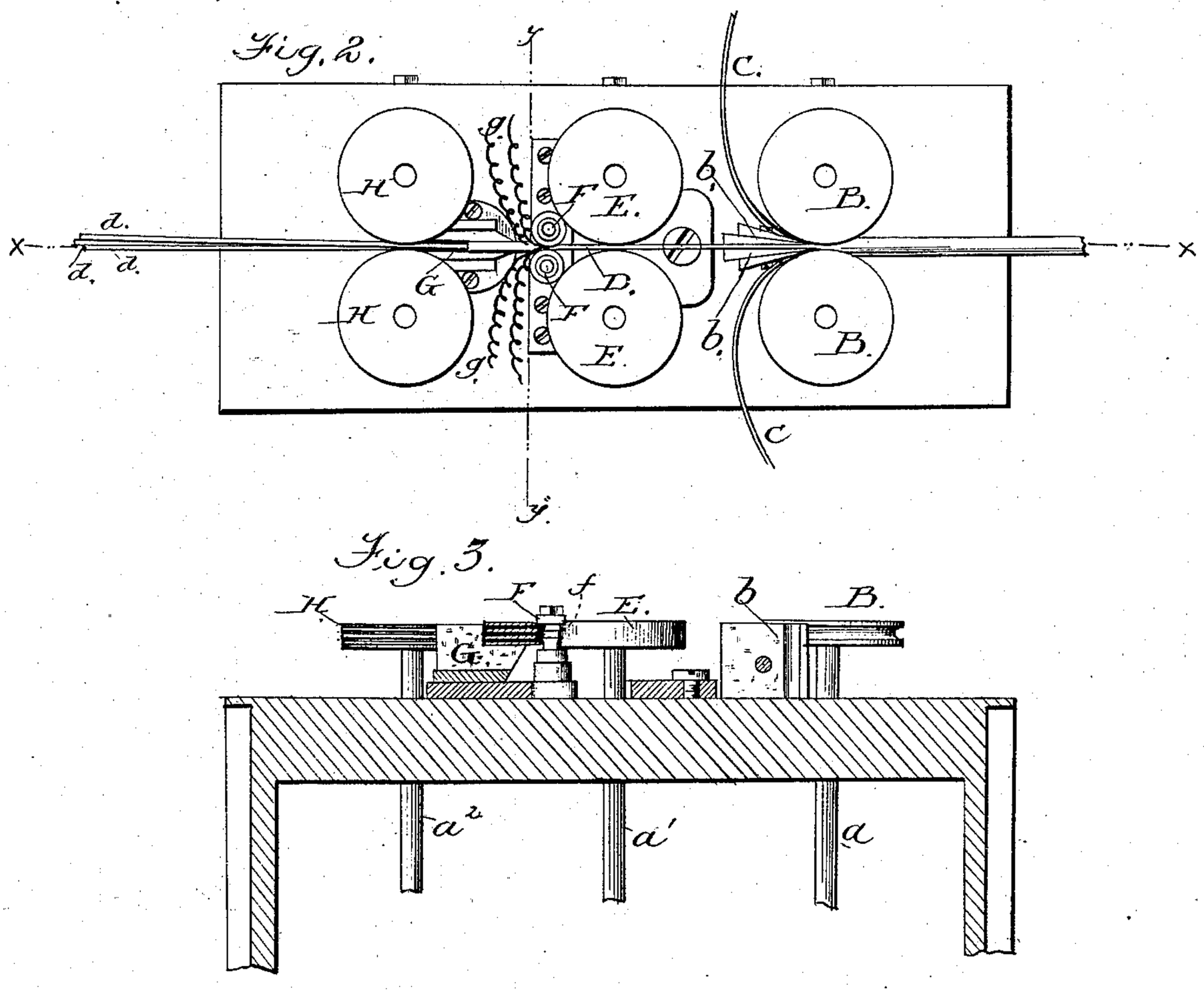


Fig. 3.

Fig. 4.

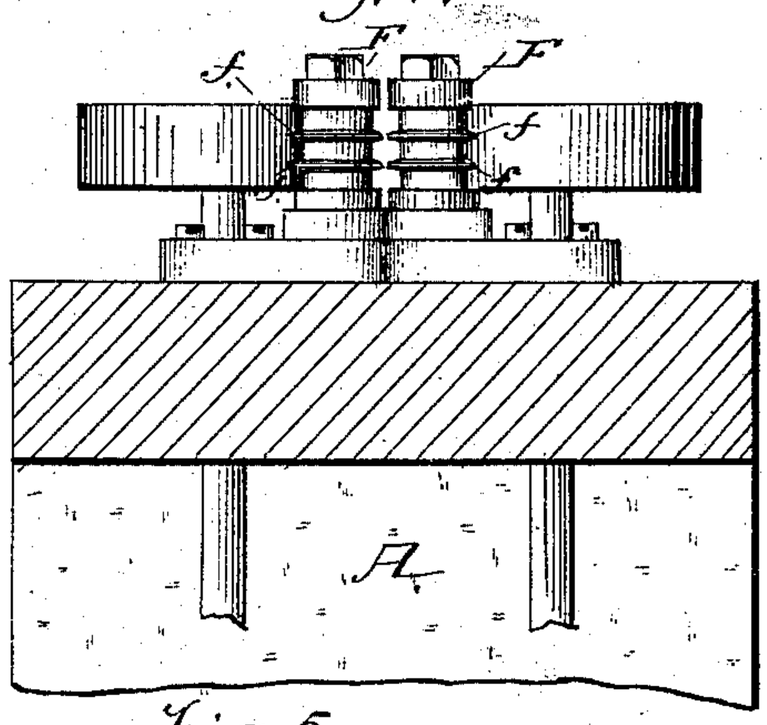
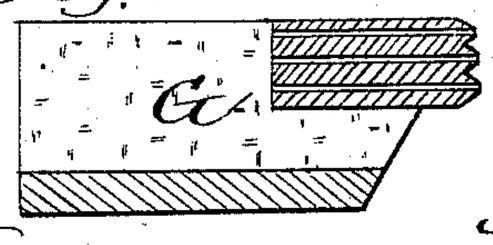


Fig. 5.



Attest:

J. Walter Fowler,

Jno. L. Condron.

Inventor;

Nathan H. Richardson

Per attys. A. H. Evans & Co

UNITED STATES PATENT OFFICE.

NATHAN H. RICHARDSON, OF BROOKLYN, NEW YORK.

MACHINE FOR WORKING RATTAN.

SPECIFICATION forming part of Letters Patent No. 237,206, dated February 1, 1881.

Application filed December 8, 1880.. (No model.)

To all whom it may concern:

Be it known that I, NATHAN H. RICHARDSON, of Brooklyn, county of Kings, and State of New York, have invented a new and Improved Machine for Working Rattan and for the Production of Bonnet and other Reeds, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of my invention as seen when in operation. Fig. 2 is a plan view of the same. Fig. 3 is a vertical section through *x x* of Fig. 2. Fig. 4 is a vertical section through *y y* of Fig. 2. Fig. 5 shows cross-sections of compound die enlarged.

My invention relates to the art of splitting and dressing rattan, and has special reference to making bonnet and other small reeds out of large stock; and it consists in an improved method of producing such reeds, and in certain combinations of devices for effecting the same, as hereinafter shown and described.

To enable others skilled in the art to make and use my invention, I will proceed to describe the exact manner in which I have carried it out.

Heretofore bonnet and other small reeds have been made only from small stock by dividing it up and then passing each division through a small die to obtain the desired size. This small stock is of limited quantity and more valuable than the larger stock; but by my improved process of treatment I secure two slabs from the large stock, which are of equal value to the stock itself, and then convert the waste material, or middle portion of the rattan, into the small reeds, as will be hereinafter described.

In the drawings, A represents the frame of my machine, provided with three pairs of vertical shafts, *a a' a²*, operated simultaneously by proper gearing, as shown in Fig. 1. On the top of the first pair of shafts, *a*, I secure guiding and feeding rolls B B, having grooves on their peripheries, and between which the rattan is fed to a pair of knives, *b b*, which divide the stock into three parts, two slabs, C C, and a central strip, D, as shown in Fig. 1. These slabs remain of equal value with the original stock, and are laid aside for various purposes. This splitting of the rattan and removing the two slabs constitutes the first step in my process. The central portion, D, of the stock is next carried between the guide-rolls E to the cylindrical revolving rolls F. These rolls are grooved with spurs or blades *f* between the grooves to partly separate and divide the strip D before it strikes the compound die G, which receives and dresses the split stock, as shown at *d d d* in Fig. 1. The shavings *g* thrown out on each side of the die G show how trifling the waste need be in this the second step of my process.

It is evident from this description that the rolls F may have any desired number of grooves and spurs, and that the compound die G may be made to correspond in capacity to simultaneously receive and dress all the divisions made in the strip D.

It is also evident that the central portion of the stock may be divided into two or more strips, D, without departing from the spirit of my invention.

After the reeds have been divided and passed through the compound die G they are caught by the grooved guide and compressing-rolls H, and passed out of the machine ready for the market.

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

1. The combination of the feeding-rolls B B, the dividing-knives *b b*, the guide-rolls E, and the subdividing cylindrical spur-rolls F, substantially as and for the purpose described.

2. The combination of the guide-rolls E, the subdividing cylindrical spur-rolls F, and the compound die G, substantially as described.

3. In a rattan-machine, the cylindrical revolving spur-rolls F, in combination with the compound die G, substantially as and for the purpose set forth.

NATHAN H. RICHARDSON.

Witnesses:

FRED B. ALEXANDER,

E. F. BABBITT.