

FRED. C. CHAS. WEBER.

Improvement in Machines for making Wire Netting.

No. 121,831.

Patented Dec. 12, 1871.

Fig. 1.

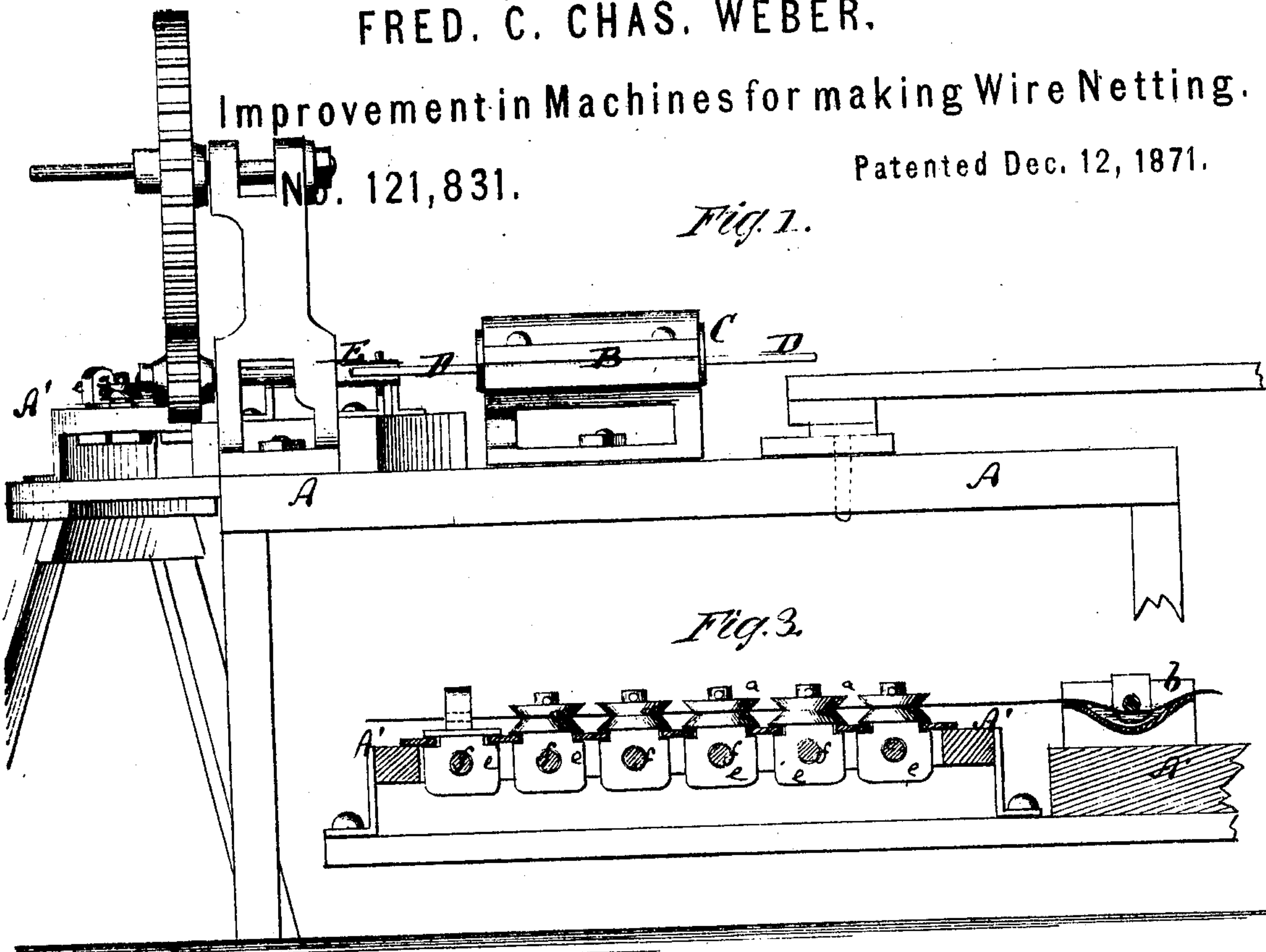


Fig. 3.

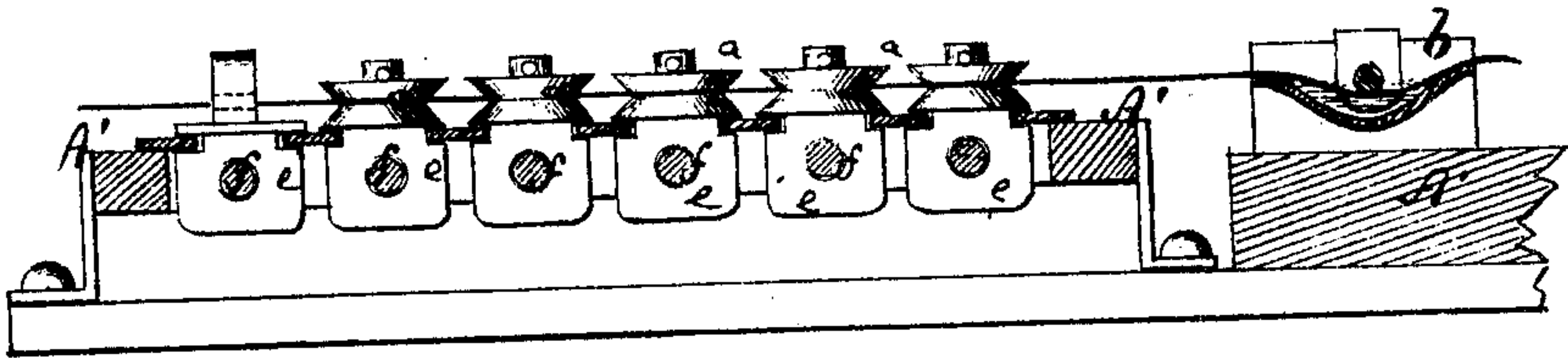


Fig. 5.

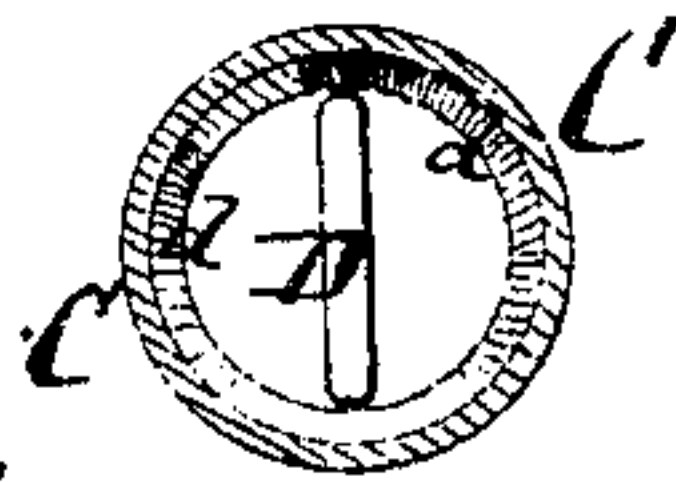


Fig. 4.

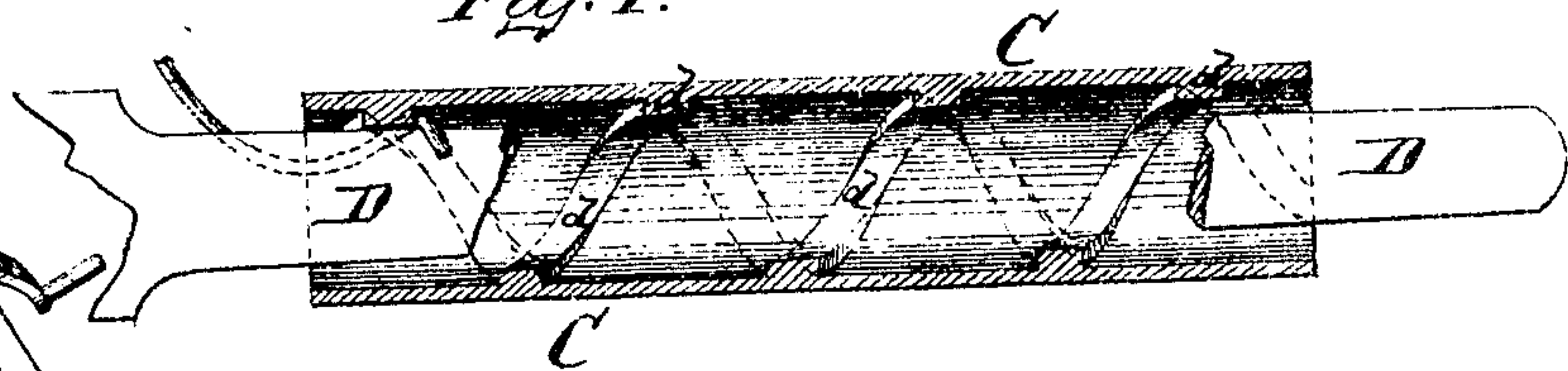
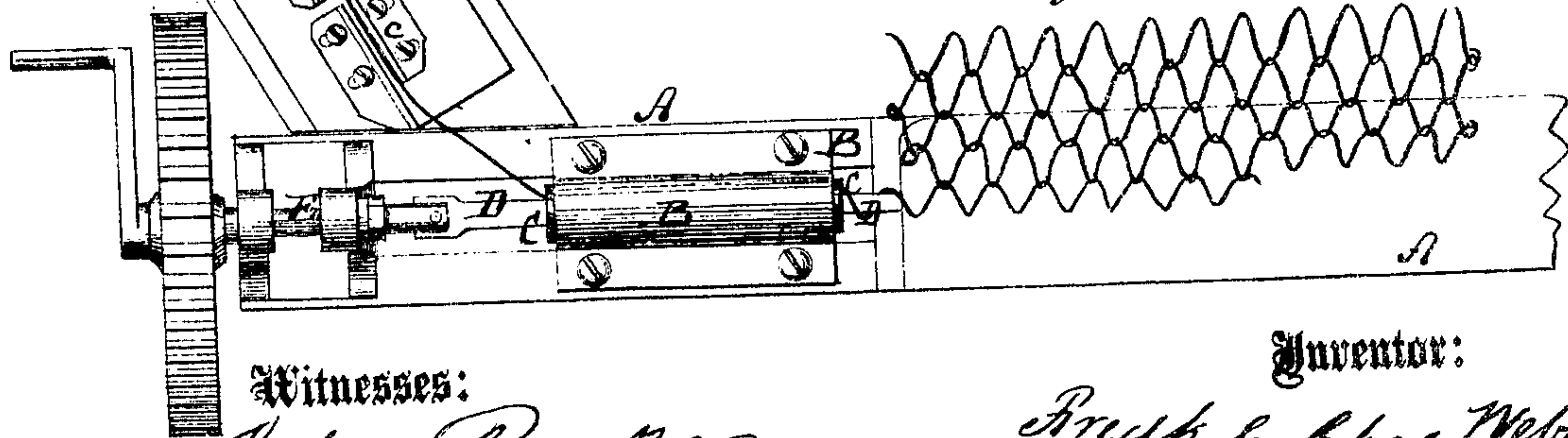


Fig. 2.



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UNITED STATES PATENT OFFICE.

FREDERICK C. CHARLES WEBER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN MACHINES FOR MAKING WIRE-NETTINGS.

Specification forming part of Letters Patent No. 121,831, dated December 12, 1871.

To all whom it may concern:

Be it known that I, FREDERICK C. CHARLES WEBER, of Brooklyn, in the county of Kings and State of New York, have invented an Improved Machine for Making Wire-Nettings; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing and letters of reference marked thereon, in which—

Figure 1 represents a side elevation of my improved machine for making wire-nettings. Fig. 2 is a plan or top view of the same. Fig. 3 is a detail side view of the friction apparatus. Fig. 4 is a detail longitudinal section of the winding-cylinder. Fig. 5 is a transverse section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new machine for bending wire into a zigzag form and interlocking successive strands of the same, to produce a fabric or netting of superior or ordinary kind. The invention consists principally in the use of a stationary cylinder having an internal spiral thread or groove, and in the arrangement therein of a rotating flat or round rod, which carries the wire around and brings it in contact with the spiral surfaces. In this manner the wire is brought to the desired shape. The invention also consists in the application to the machine of adjustable friction-rollers, lubricating device, and guide, all as hereinafter more fully described.

A, in the drawing, represents the frame or table of my improved netting-machine. It is made of suitable size and shape according to the style of netting to be produced thereon, and preferably made in sections, which will enable its being taken apart, lengthened, or shortened at will. One section, A', of the table, is set at an angle to the main table A, and contains a series of friction-rollers *a a*; also the lubricating-cup *b*, and the wire-guide *c*. The main table supports, in a longitudinally-adjustable or entirely stationary block, B, an open-ended hollow cylinder, C, within the inner circumference of which a spiral thread, *d*, is rigidly fastened, or an equivalent spiral groove provided. D is a flat rod, attached

to the end of a short shaft, E, that has its bearings in one end of the frame A, and is, by gearing or otherwise, connected with suitable motive power. The rod D projects lengthwise through the cylinder C, as shown, and is revolved therein whenever rotary motion is imparted to the shaft E. The wire to be formed into netting is from a coil drawn between the friction-rollers *a*, which are affixed to laterally-adjustable blocks *e e*, and set by screws *f f*, to apply the requisite amount of friction to the wire. From the friction-rollers the wire passes through the cup *b*, containing oil or equivalent matter for smoothing the surface of the wire. Thence it is by the guide *c* directed to the proper spot where the rod D is to take hold of it. The end of the wire is first hooked over the rod D, and the latter then revolved so that it will carry the wire around, at the same time holding it against the spiral thread or groove *d* of the cylinder. On this spiral surface the wire is guided ahead, and receives its convolutions while on the rod D. It is at the same time flattened to finally assume the flat zigzag form represented in Fig. 2. If, in place of the flat rod D one circular or oval in cross-section is employed, the convolutions of the wire will be accordingly made round or oval.

The wire issues in the required shape from the end of the cylinder, and is deposited on the table A. When the desired length which may be suitable has been formed it is cut and moved slightly aside, so that the next course from the cylinder will enter and pass through the meshes of that last finished, and thus complete the netting by interlocking the several strands. In this manner netting of suitable length and width can be rapidly produced at a small expense. Such netting can be used for all purposes to which wire-work is now applied, and will, for larger surfaces, being made in large sheets or pieces, be much more acceptable than ordinary wire-netting, as it has not to be joined in narrow widths.

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

1. The stationary cylinder C, provided with the spiral groove or thread *d*, for the purpose of producing convolutions in wire, substantially as herein shown and described.

2. The rotary rod D, fitted through the sta-

tionary cylinder, having the spiral groove or thread *d*, substantially as and for the purpose herein shown and described.

3. The method herein described, of forming wire-netting by pushing the wire-strands from the winding apparatus through the strands last finished, as specified.

4 The combination of the friction-rollers *a a*,

oil-cup *b*, and guide *c*, with the stationary cylinder C, spiral thread or groove *d*, and rotary blade or rod D, substantially as herein shown and described.

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