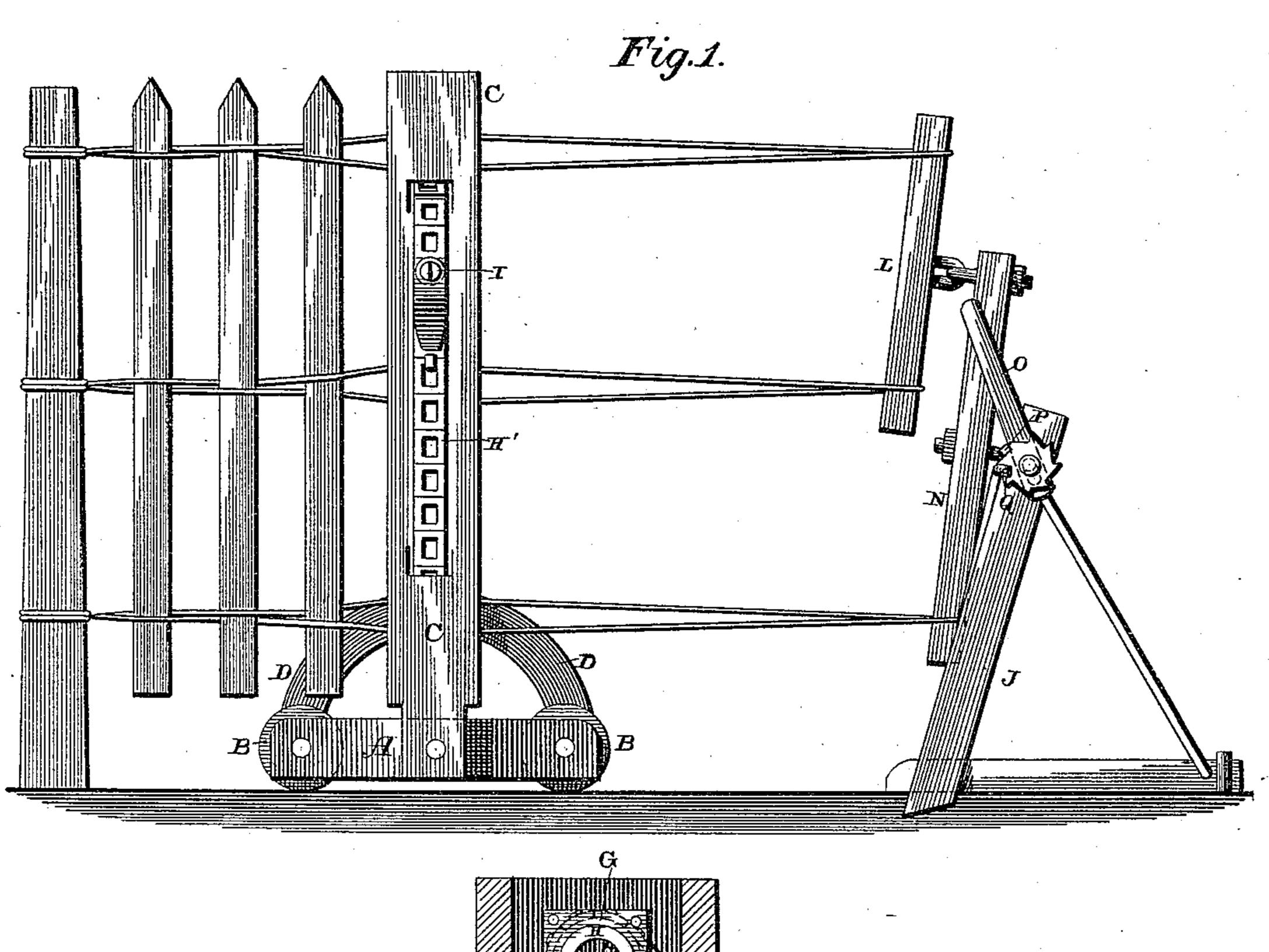
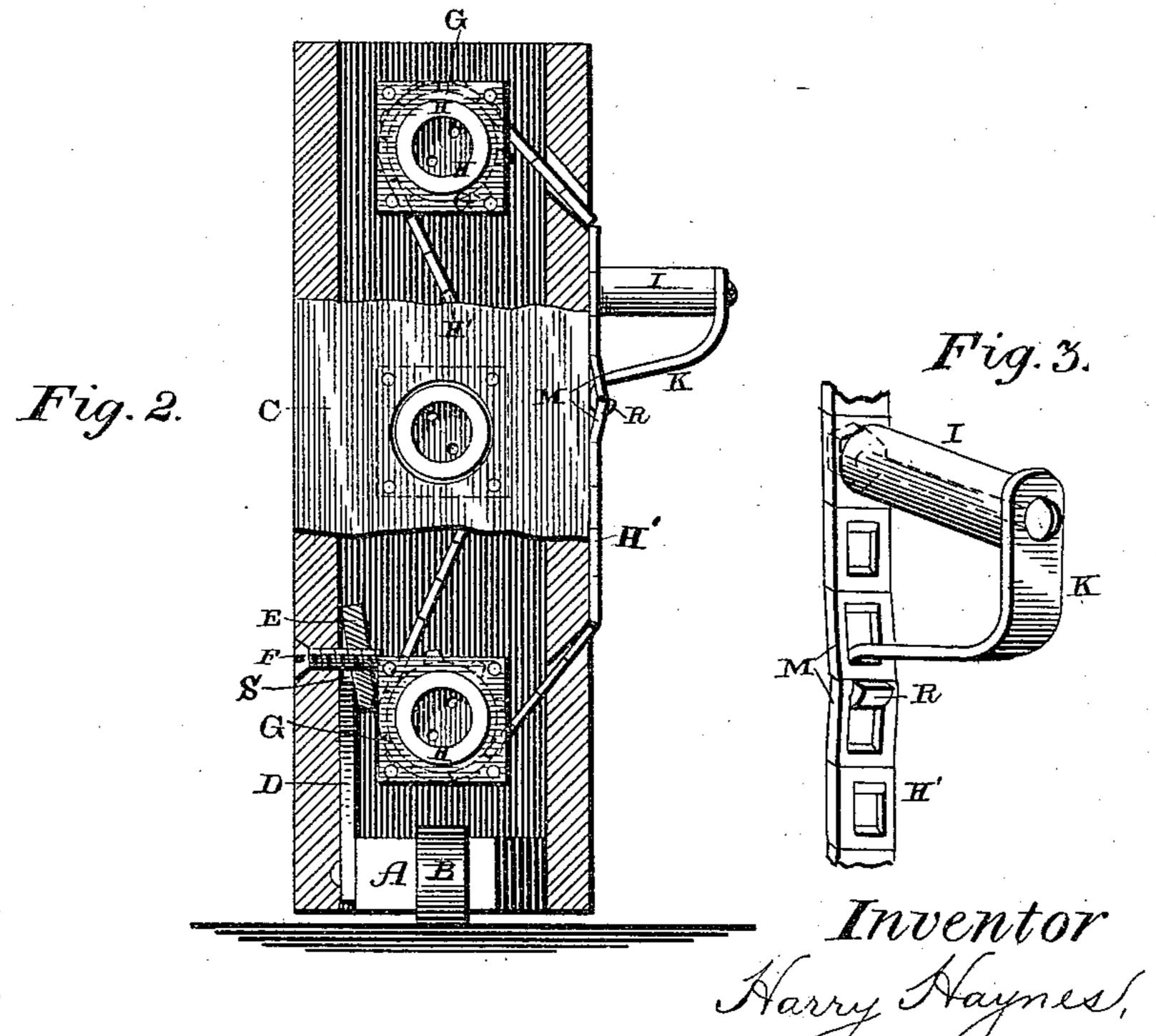
(No Model.)

H. HAYNES. FENCE WEAVING MACHINE.

No. 450,573.

Patented Apr. 14, 1891.





Witnesses:

United States Patent Office.

HARRY HAYNES, OF COLDWATER, MICHIGAN, ASSIGNOR OF ONE-HALF TO IRENE ROOT, OF SAME PLACE.

FENCE-WEAVING MACHINE.

SPECIFICATION forming part of Letters Patent No. 450,573, dated April 14, 1891.

Application filed October 20, 1890. Serial No. 368,728. (No model.)

To all whom it may concern:

Beitknown that I, HARRY HAYNES, of Coldwater, in the county of Branch and State of Michigan, have invented certain new and use-5 ful Improvements in Fence-Weaving Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, 10 reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in fence-weaving machines; and it consists in 15 certain novel features of construction, which will be fully described hereinafter.

The object of my invention is to produce a fence-weaving machine of the construction hereinafter shown and described for the pur-20 poses set forth.

Figure 1 is a side elevation of a machine which embodies my invention complete. Fig. angles to Fig. 1 and partly in section, to show 25 the operation of the twisters. Fig. 3 is a detached perspective of the handle and a portion of the operating-chain.

A represents the carriage or frame, which is provided with a wheel B at each end, and 30 upon which the frame C of the machine is pivoted. This machine being pivoted to the carriage, it becomes necessary to provide a means for holding the machine in position and to adjust it so that it will always be in a 35 vertical position going up or down hill. For this purpose the segment D is rigidly secured to the carriage A and is made to pass through an opening S, which is made near one edge of the machine, as shown in Fig. 2. Inside of 40 the frame C is placed a clamping-block E, into which the screw F is made to catch. By means of this screw the clamping-block and frame C can be secured rigidly to the segment D, so that when in use, whether going up or 45 down hill, the pickets will be woven in a vertical position.

Secured inside of the frame for each twisting-wheel that is used are two metallic plates G, which are provided with perforations suf-50 ficiently large to receive the flanged portions of the wheels H, which flanged portions serve as journals or bearings for the wheels. These

plates are placed just opposite the openings through the frames, so that the wheels in being revolved do not wear or injure the frame 55 in the slightest. Through these twisting or crossing wheels are formed the usual openings through which the wires are passed and by means of which the wires are alternately twisted or crossed first in one direction and 60 then the other. Passing around these wheels, which are provided with sprocket-teeth upon their peripheries, is the sprocket-chain H', which has its two ends to extend through openings in the side of the frame, so that they can 65 be fastened together. To this chain outside of the frame is fastened the handle I, by means of which the chain is moved in first one direction and then the other by alternately depressing and raising the handle. The inner 70 end of the handle is adjustably connected to the chain near one end thereof in any suitable manner, and connected to the outer end of the handle I is a brace K. The brace is 2 is a front view of the machine, taken at right | bent inward, as shown, and has its lower end 75 formed into a hook R, which passes through the two end links M of the chain and connects them, as shown. By means of this connection the brace serves as a support and brace for the outer end of the handle and as a means 80 of connecting the ends of the chain. There will be three, five, or any desired number of twisting or crossing wheels, according to the number of strands of wire it is desired to use, as I do not limit my invention in this respect. 85

> The necessary tension is applied to the wires by means of the triangular frame J and the compound levers L and N. Journaled in the upper end of the triangular frame is a shaft provided with a ratchet-wheel upon one end 90 and with which a slotted lever O, having a dog P formed as a part or rigidly secured thereto, engages. The shaft is prevented from turning backward by means of a pawl Q. Extending from this shaft to the lower lever 95 N above its center is a connecting wire or cord, by means of which any desired amount of tension is placed upon the levers. Two of the strands of wire are connected to opposite ends of the upper shorter lever L, and the 100 third and lower strand is connected to the lower end of the longer lever N when but three strands are used. The triangular frame is fastened into position in any suitable man

ner, and then the strands of wire are given the desired amount of tension by drawing the levers backward, as described, by the shaft journaled in the upper end of the triangular frame.

Having thus described my invention, I claim—

In a fence-weaving machine, the combination of a frame, the twister-wheels journaled therein, a chain which passes around the wheels, a horizontal handle having its inner end connected to the chain near one end, and

a brace connected at one end to the outer end of the said handle and having its opposite end formed into a hook which passes through the 15 end links of the chain and connects them, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

HARRY HAYNES.

Witnesses:

L. D. FISKE,

F. D. MARSH.