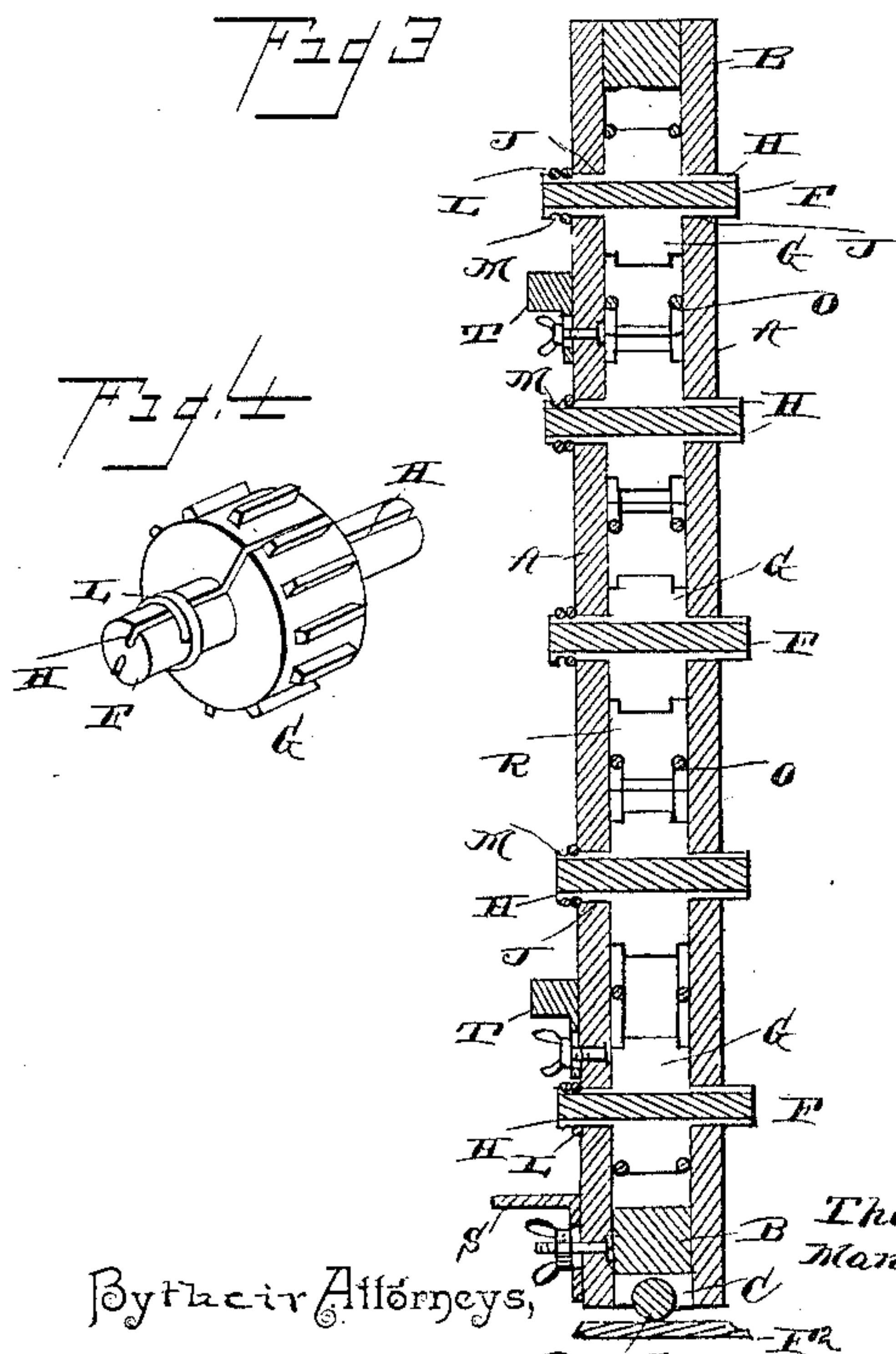
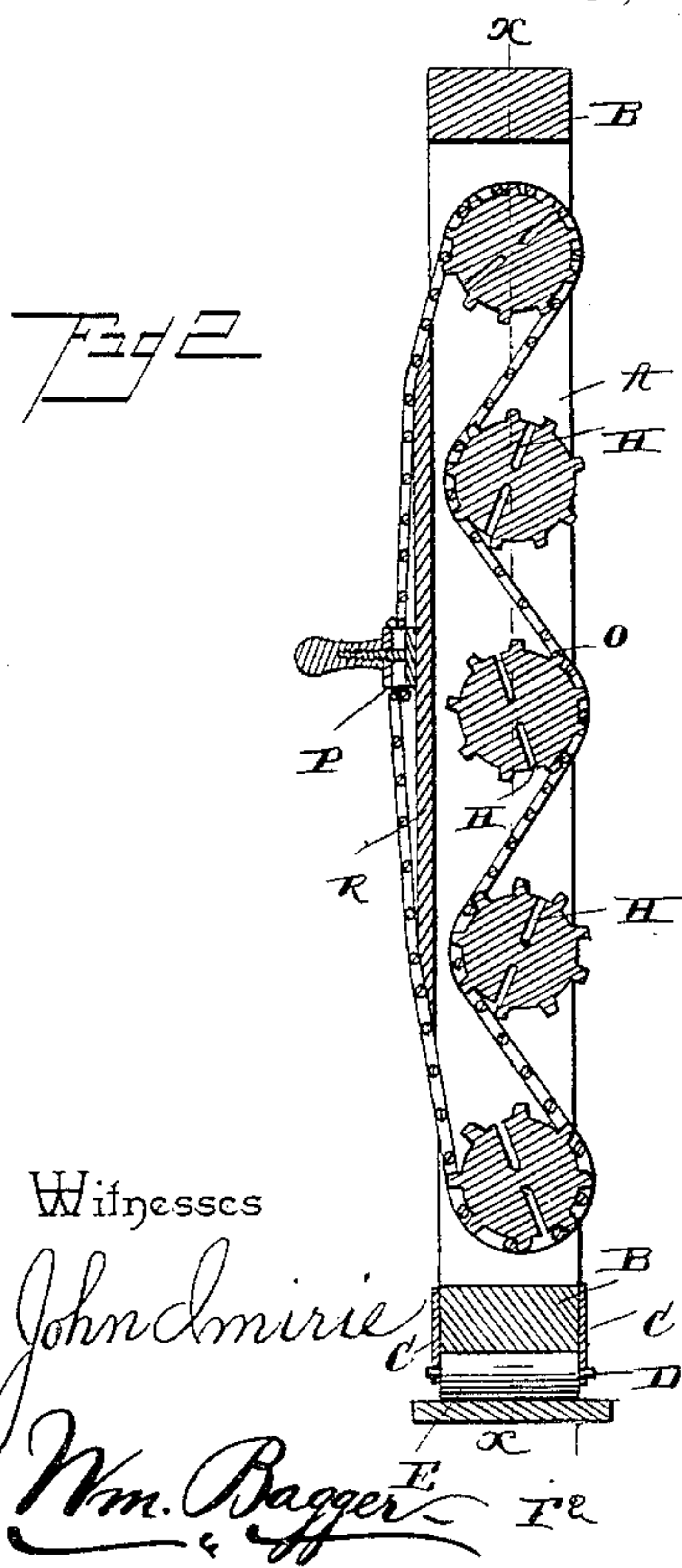
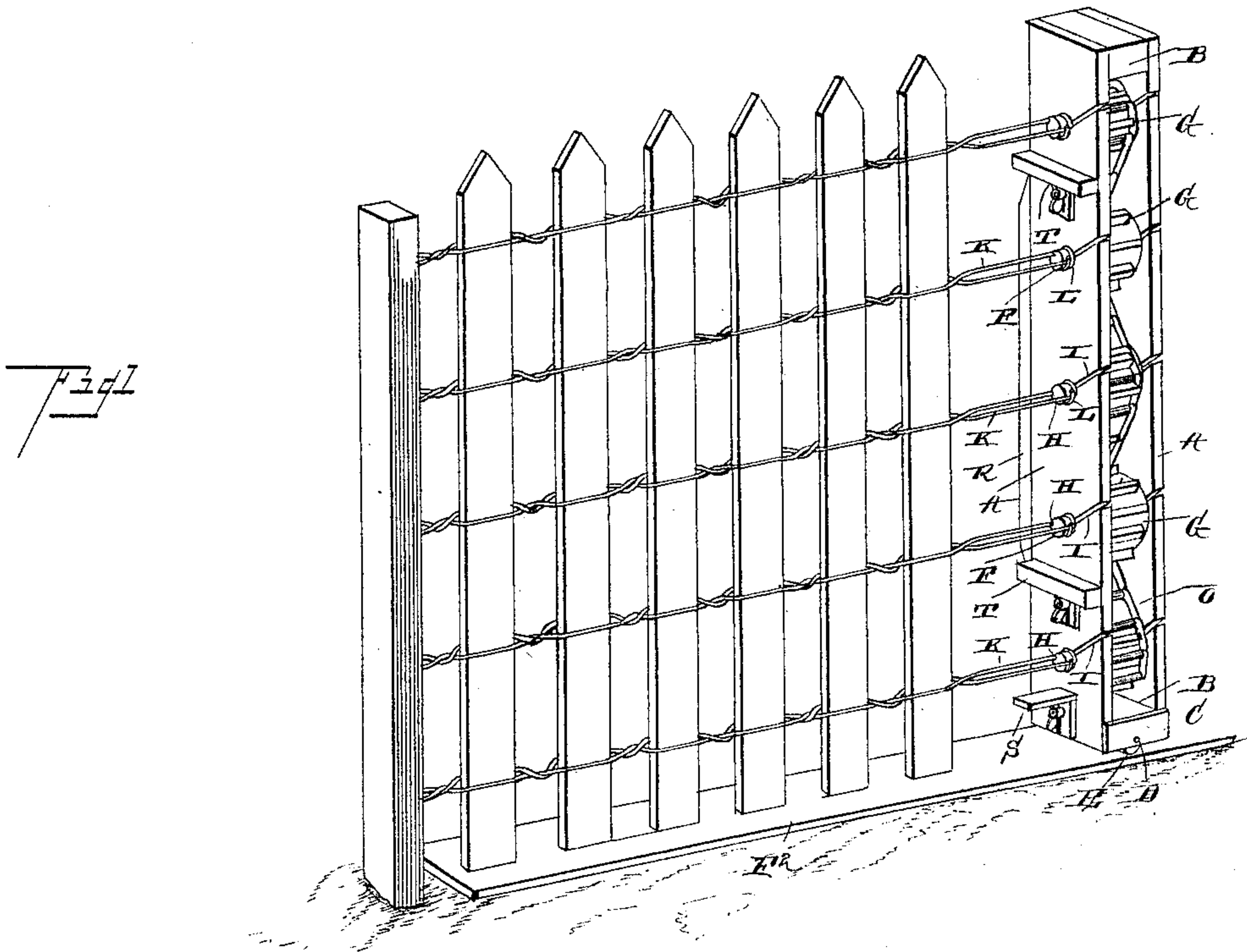


(No Model.)

T. G. & M. R. SIMPSON.
FENCE MACHINE.

No. 410,654.

Patented Sept. 10, 1889.



Witnesses

John Amirie
Wm. Bagger

By their Attorneys,

Inventor

Thomas G. Simpson
and
Mansfield R. Simpson

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

THOMAS G. SIMPSON AND MANSFIELD R. SIMPSON, OF YORK, NEBRASKA.

FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 410,654, dated September 10, 1889.

Application filed June 22, 1889. Serial No. 315,155. (No model.)

To all whom it may concern:

Be it known, that we, THOMAS G. SIMPSON and MANSFIELD R. SIMPSON, citizens of the United States, residing at York, in the county of York, and State of Nebraska, have invented a new and useful Fence-Machine, of which the following is a specification.

This invention relates to machines for constructing fences of wire and slats or pickets woven together; and it has for its object to construct a machine of this class which may be readily adjusted upon the wires in position for operation at any desired point without cutting the wires for the purpose of passing them through the twisting-heads.

A further object of the invention is to so construct the machine as to cause the wire to be retained securely in the twisting-heads without danger of slipping out while the machine is in operation.

With these ends in view the invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a perspective view of our improved fence-machine, showing the same adjusted upon the wires in position for operation. Fig. 2 is a vertical transverse sectional view of the same. Fig. 3 is a vertical sectional view taken on the line *x x* in Fig. 2. Fig. 4 is a detail view of one of the twisting-heads and the split ring adjustable upon the same for the purpose of retaining the wires in position.

The same letters refer to the same parts in all the figures.

The frame of our improved fence-machine is constructed of a pair of vertical parallel bars A A, connected near the upper and lower ends by means of blocks B B. At the lower end of the sides of the frame are secured the plates C C, which afford bearings for a shaft or axle D, carrying a roller E, which serves to support the machine in its operative position, a board F² being placed upon the ground in the path of the machine to form a track for the same.

The vertical frame-bars A A are provided with bearings for a series of shafts F F, provided with sprocket-wheels G G, which form the twisting-heads of our improved machine.

The said shafts and sprocket-wheels are provided on diametrically-opposite sides with longitudinal grooves or recesses H H, adapted to receive the wires of which the fence is to be constructed.

The front sides of the frame-bars A A are provided with inclined slots I I, extending from the bearings J of the shafts F in an upward and outward direction, so that by turning the said shafts the grooves in the latter and in the sprocket-wheels thereon may be caused to register with the said inclined slots I I. It will be seen that when the shafts and sprocket-wheels are in this position the wires, which are designated by letters K K, may be readily inserted into the longitudinal grooves or recesses H H, one of the fence-wires being first thus inserted, after which a half-turn is given to the shafts and sprocket-wheels, and the other wire is then inserted into the diametrically-opposite groove.

To retain the fence-wires in the grooves H H while the machine is in operation, I employ a series of split rings or lap-rings L L, which may be placed in annular grooves M upon the projecting ends of the shafts F. These rings, it will be seen, serve to prevent the wires from escaping from the grooves H when the latter register with the inclined slots I.

The sprocket-wheels, which form the twisting-heads of my improved fence-machine, are operated simultaneously by means of a chain O, which is passed around the entire series of said twisting-heads, and the ends of which are connected by means of a clamp or clasp P, to which a handle is attached.

The front sides of the frame-bars A A are connected by a plate R, which enables the chain to be conveniently operated without danger of becoming entangled.

One side of the machine is provided with a vertically-adjustable gage S, to regulate the distance of the pickets from the ground, and it is likewise provided with adjustable buffers T T, adapted to jam the pickets into bights of the wire when the machine is in operation.

The operation and advantages of our improved fence-machine will be readily understood from the foregoing description taken in connection with the drawings hereto annexed. After the machine has been adjusted upon

the wires, the pickets are placed in position in the ordinary way or manner, and by moving the handle attached to the chain up or down, as occasion will require, the twisting-heads may then be rotated sufficiently to twist the wires to the desired extent.

It will be seen that the ends of a chain are connected detachably by means of the clamp carrying the handle, and this clamp, it will be understood, may be of any desired construction. By removing the said clamp the ends of the chain will be separated, and the machine may then be readily adjusted upon or removed from the fence-wires at any desired point.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a fence-machine, the combination of the frame having bearings for the twisting-shafts and slots extending from said bearings to the outer edges of the frame-bars, the shafts journaled in said bearings and having longitudinal grooves adapted to register with said slots, the split rings or lap-rings adapted to be adjusted upon the projecting ends of said shafts, and means for rotating the latter, substantially as set forth.

2. In a fence-machine, the combination of a frame having bearings for the twisting-shafts and slots extending from said bearings to the outer edges of the frame-bars, the shafts journaled in said bearings and having

sprocket-wheels located between the frame-bars, said shafts and sprocket-wheels being provided with longitudinal diametrically-opposite grooves adapted to register with the slots in the frame-bars, the split rings adjustable upon the projecting ends of the shafts, and an operating-chain having its ends connected together detachably, substantially as set forth.

3. In a fence-machine, the combination of the frame having bearings for the twisting-shafts and slots extending from said bearings to the outer edges of the frame-bars, the shafts journaled in said bearings and having sprocket-wheels located between said frame-bars, said shafts and sprocket-wheels being provided with longitudinal grooves or recesses, the split rings adjustable upon the projecting ends of the shafts, an operating-chain passing over the series of sprocket-wheels, and a clamp connecting the ends of the chain detachably and provided with a handle by means of which said chain may be operated to rotate the twisting-heads, substantially as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

THOMAS G. SIMPSON.

MANSFIELD R. SIMPSON.

Witnesses:

C. H. HAMLIN,

J. K. SIMPSON.