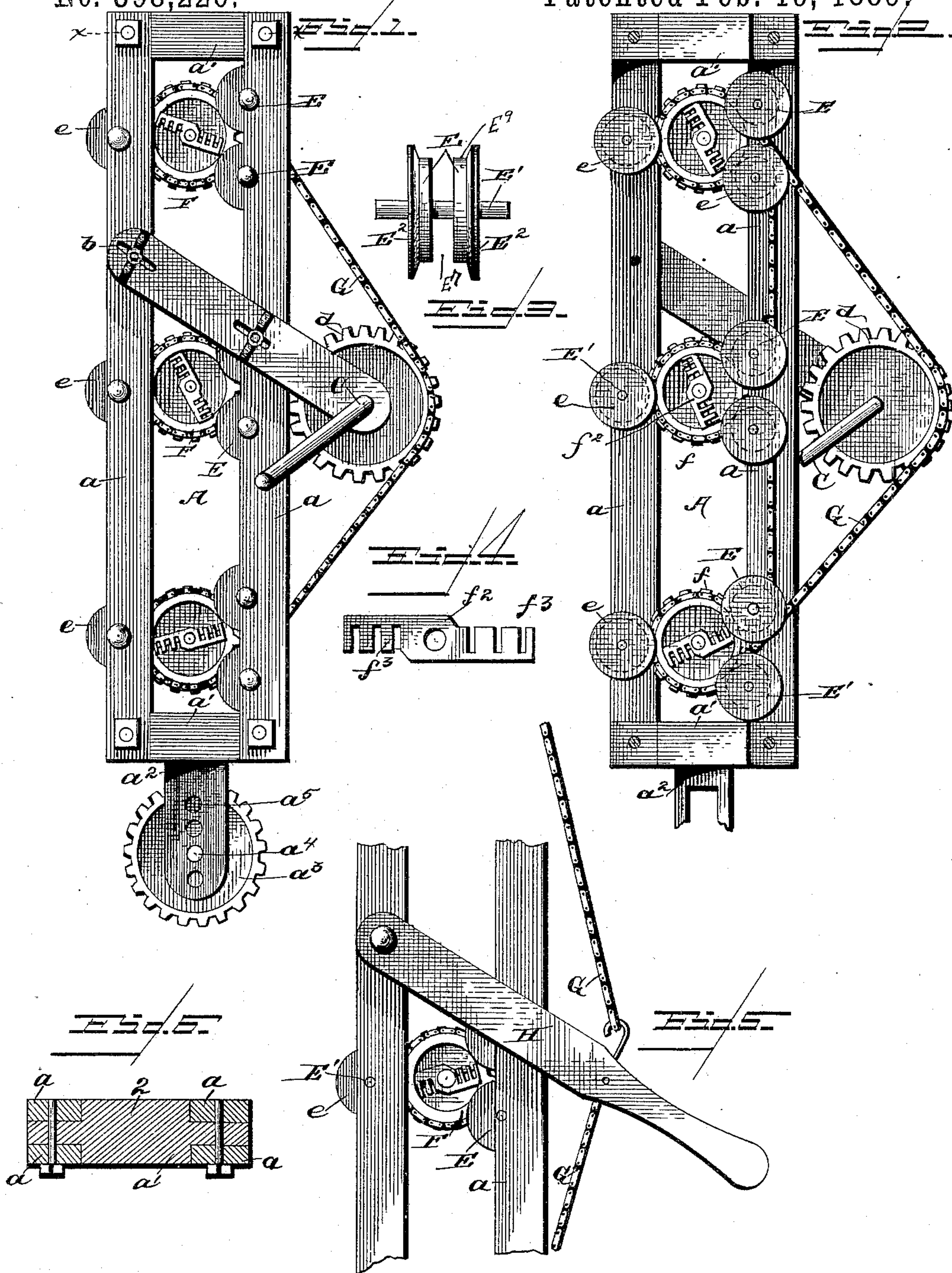


(No Model.)

H. G. CADY.
FENCE MACHINE.

No. 398,226.

Patented Feb. 19, 1889.



WITNESSES,
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UNITED STATES PATENT OFFICE.

HENRY G. CADY, OF PINE BLUFF, ARKANSAS.

FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 398,226, dated February 19, 1889.

Application filed September 8, 1888. Serial No. 284,898. (No model.)

To all whom it may concern:

Be it known that I, HENRY G. CADY, a citizen of the United States of America, residing at Pine Bluff, in the county of Jefferson and State of Arkansas, have invented certain new and useful Improvements in Fence-Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to certain new and useful improvements in fence-machines; and it comprises the details of construction, combination, and arrangement of parts substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved fence-machine. Fig. 2 is a similar view with one of the sides of the frame removed. Figs. 3 and 4 are enlarged detail views, and Fig. 5 is a view of a modification. Fig. 6 is a detail plan view of the upper end of the frame.

Referring to the drawings, A designates the frame of my improved fence-machine, which comprises adjoining upright or parallel bars *a a*, removably connected at their upper and lower ends to short cross-blocks *a'* by means of nutted bolts 2, as shown in Fig. 6. To the lower end of this frame is secured a short block, *a²*, in the groove or slot of which revolves a small toothed wheel, *a³*, the axle *a⁴* of which is secured in any two of the oppositely-disposed series of holes or apertures *a⁵* in the sides of said block, whereby the height at which the machine is to be held can be readily regulated. The teeth of this wheel *a³* serve to hold the same steady and in position, the flange of the wheel preventing the teeth from penetrating too deep into the dirt.

B B are two inclined arms secured to the sides of the frame A by means of screws *b b*, passed through slots *b' b'* in said arms. Between the lower outer ends of these arms is secured a sprocket-wheel, C, the axle *d* of which has a crank-handle, *d'*, as shown, for operating the same.

Between two of the parallel bars *a a* of the frame A are pivotally secured in pairs small grooved rollers E E, and between the other two bars *a a* of the frame are secured, about midway of each of said pairs of rollers E, a second series of grooved rollers, *e*. Each set

of opposite rollers E *e* consists of two wheels secured on separate hubs or shafts E', and each roller has an outer flange, E², as shown in Fig. 3.

F indicates a series of twisting-heads composed each of a sprocket-wheel, *f*, wherein are formed two opposite slits, *f' f'*. To the front of each twisting head or wheel is pivotally secured a plate, *f²*, having on either side of its center a series of oppositely-projecting arms, *f³ f³*, as shown. A sprocket-chain or perforated belt, G, is passed around the main operating-wheel C and is carried up to and around the upper sprocket-wheel or twisting-head, entering the grooves formed by the opposite rollers adjacent thereto, and after being passed in like manner around the central and lower twisting-heads it is carried up and secured to its other end. The twisting-heads are held in place by means of this chain or belt and the adjacent rollers, between the grooves of which said heads project. The sprocket-teeth of the twisting-heads project between the rollers E into the space marked E⁷ in Fig. 3, and the heads rest against the surface marked E⁹.

In practice wire is inserted into the opposite slits of the twisting-heads, and is secured at the desired point, according as a long or short twist in the wire is desired, by means of the plates *f²*, between the arms of which said wires project.

The operator by turning the crank-handle will impart motion through the wheel C and chain or belt to the series of twisting-heads, the same being turned in one direction sufficient to give the desired twist to the wire, after which for the next twist the movement is in the reverse direction.

The wires are always inserted between corresponding arms of the plates of each twisting-head according to the length of the twist of the wires it is desirable to obtain.

It will be seen that my invention is extremely simple, and that by means thereof the wires can be readily and easily twisted in the formation of a wire-and-panel fence, and that said twists can be regulated as may be desired; and it also embodies advantages in point of general efficiency and inexpensiveness.

In lieu of the means hereinbefore described

for imparting motion to the twisting-heads, I can employ the means shown in Fig. 5.

In this form of operating mechanism I employ a lever or rod, H, pivoted to frame A, and to this lever or rod I connect the ends of the chain or belt G, and thus dispense with the wheel C and its crank-shaft, together with the inclined arms B. The operator by moving the lever or rod H up and down will give a back and forth movement to the twisting-heads, with the teeth of which the chain or belt engages.

I claim as my invention—

1. As an improvement in fence-machines, the series of twisting-heads having opposite slits and the plates pivotally secured to said twisting-heads and having a series of oppositely-projecting short arms, substantially as shown and described.

2. As an improvement in fence-machines, the frame having the small grooved rollers

secured thereto, the twisting-heads resting in the grooves of said rollers and between the latter, the operating chain or belt passed around said twisting-heads and rollers, and the means for operating said chain or belt to which the same is secured, substantially as set forth.

3. The combination, with the frame having the rollers arranged in pairs and the centrally-disposed opposite rollers, of the operating-wheel, the adjustable arms therefor, the series of twisting-heads located between said rollers, and the chain or belt passed around said twisting-heads and operating-wheel, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY G. CADY.

Witnesses:

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T. B. LYLE.