

A. F. WEBB & J. L. DUNCAN.
Automatic Gate-Latch.

No. 226,577.

Patented April 13, 1880.

Fig. 1.

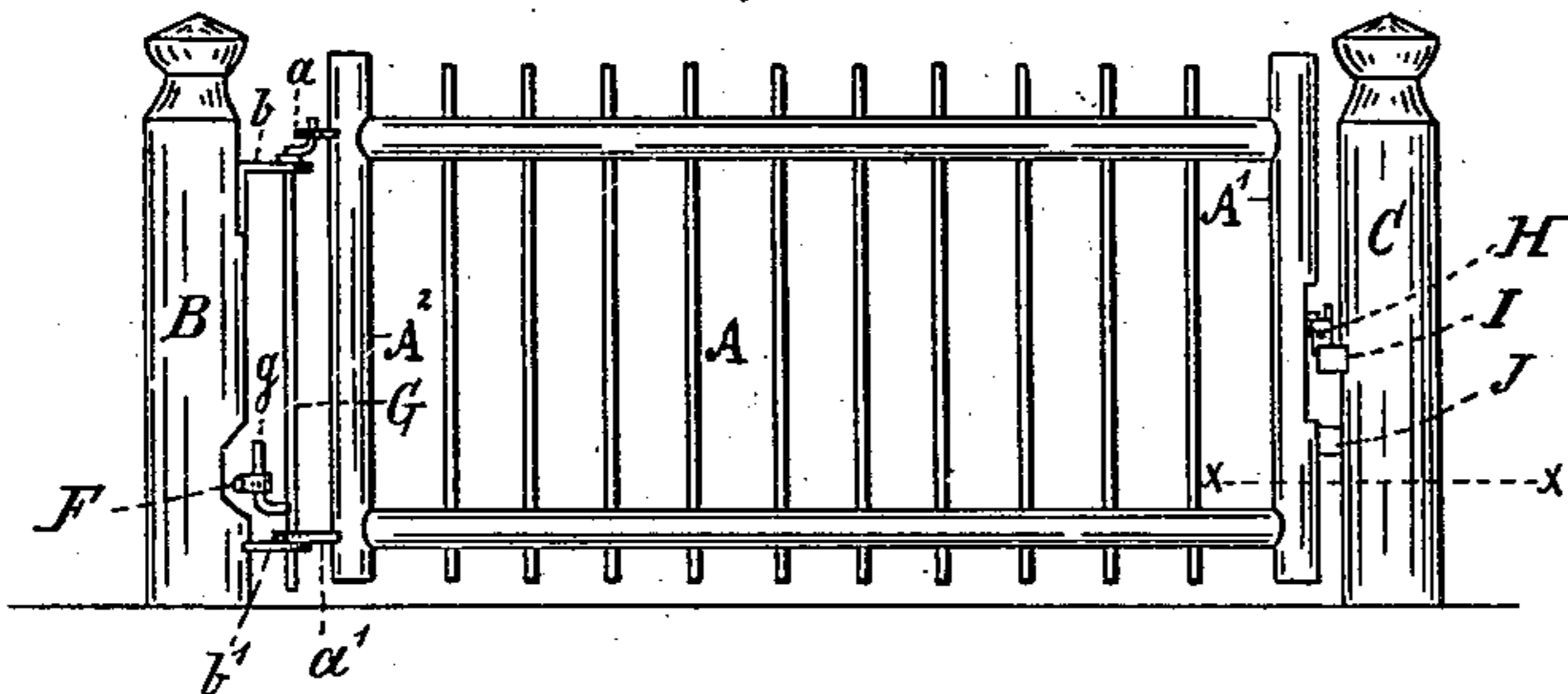


Fig. 3.

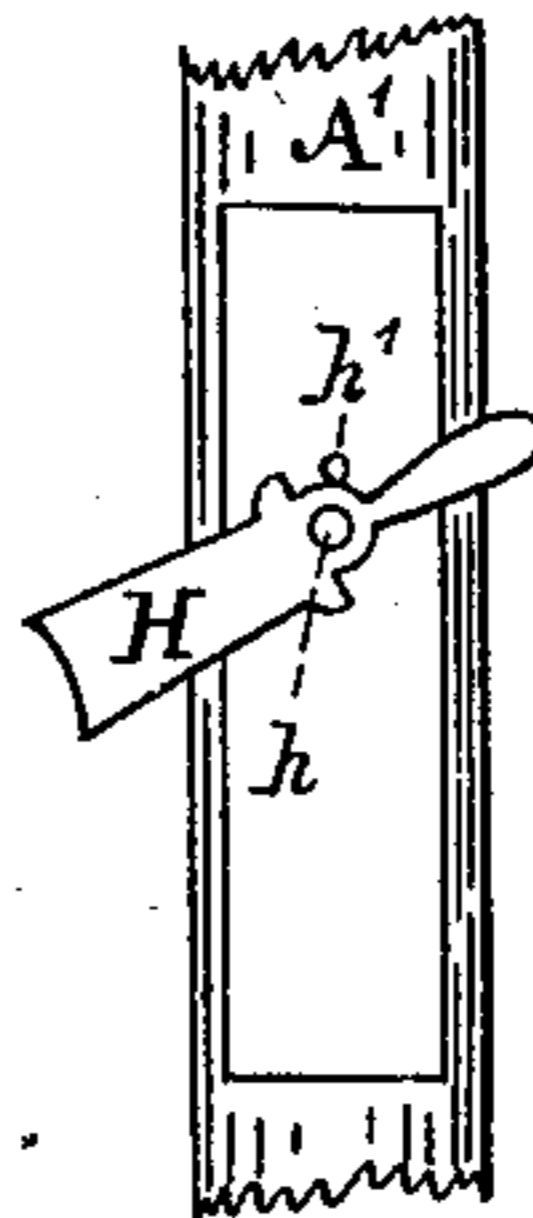


Fig. 2.

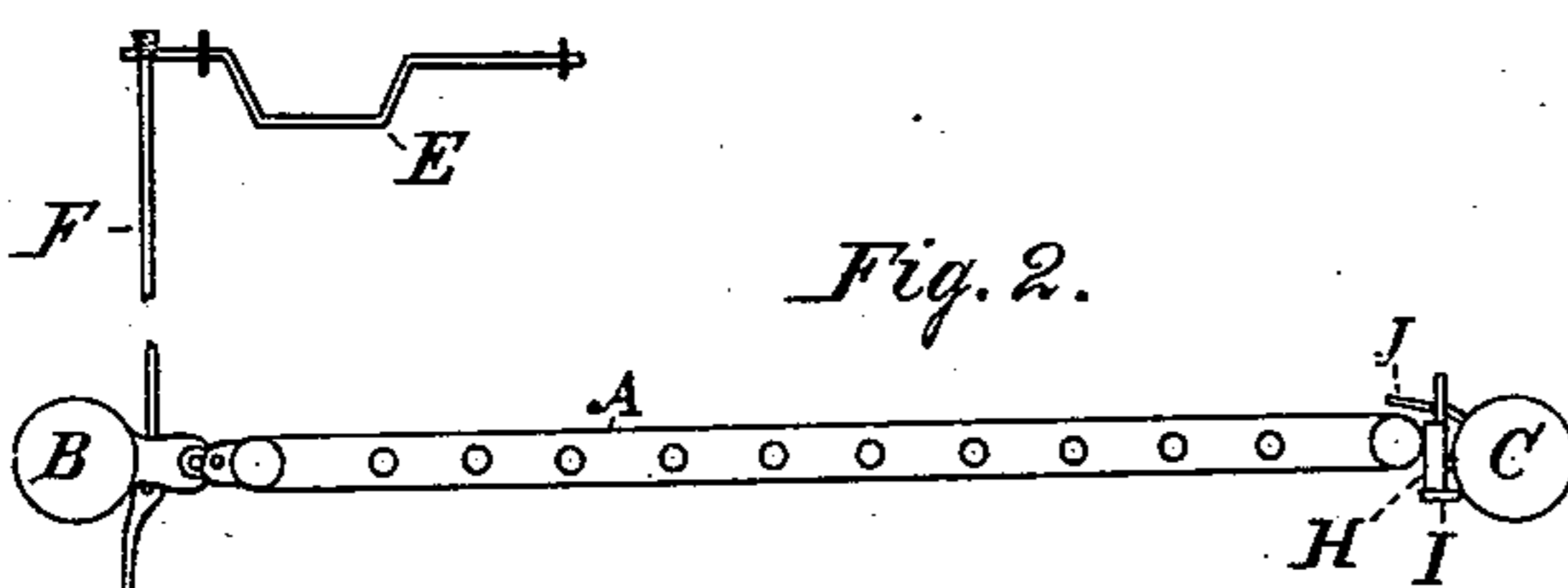


Fig. 4.

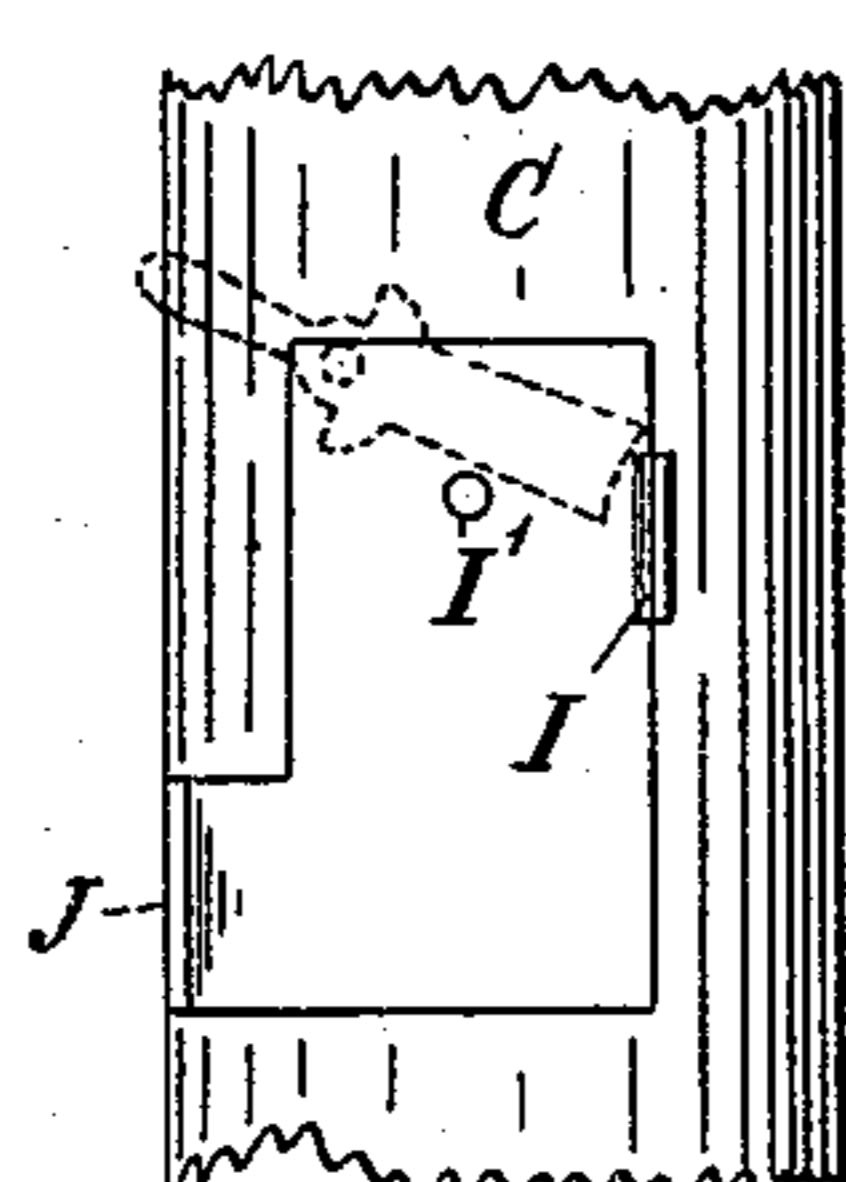


Fig. 6.

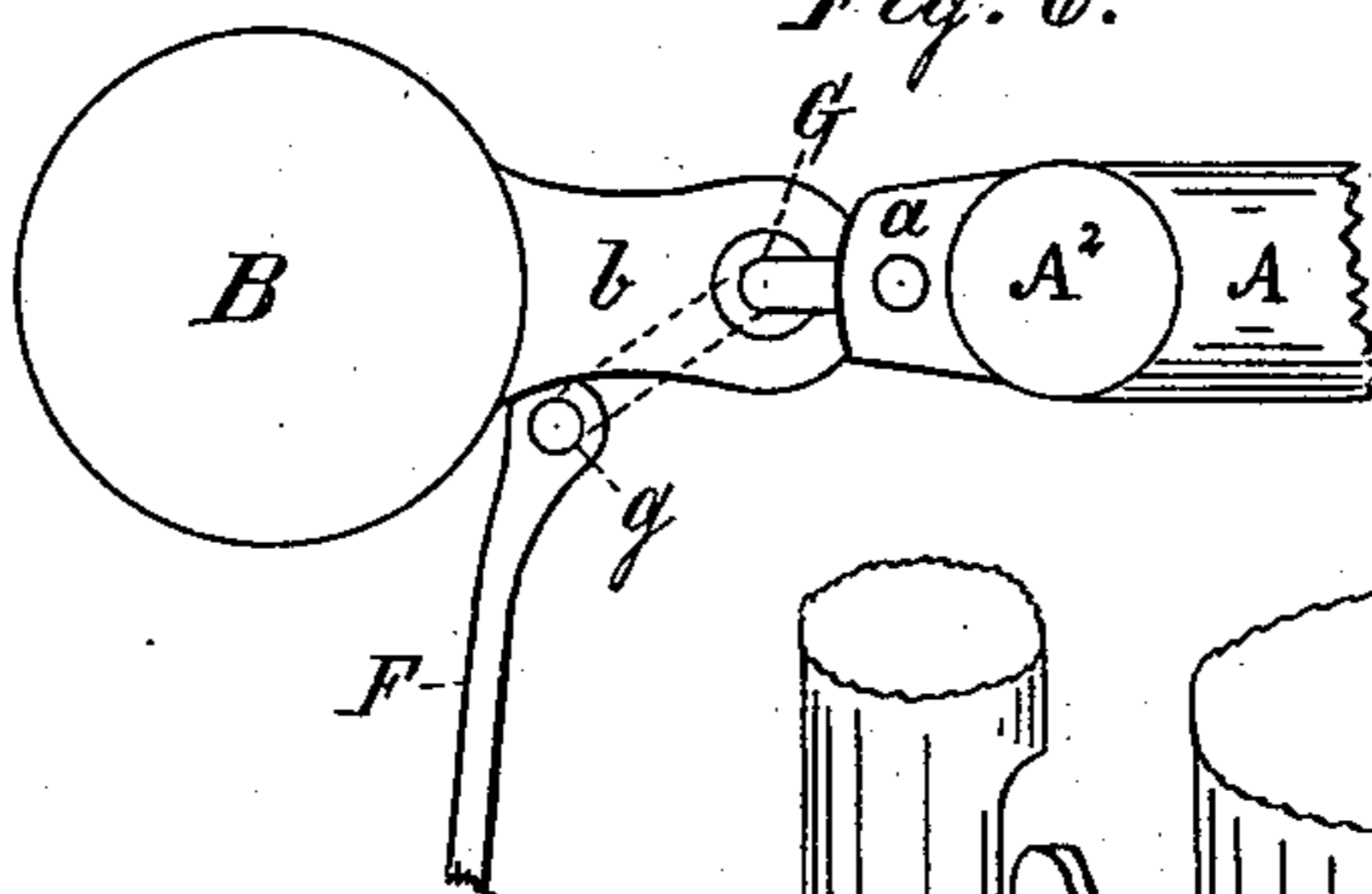


Fig. 7.

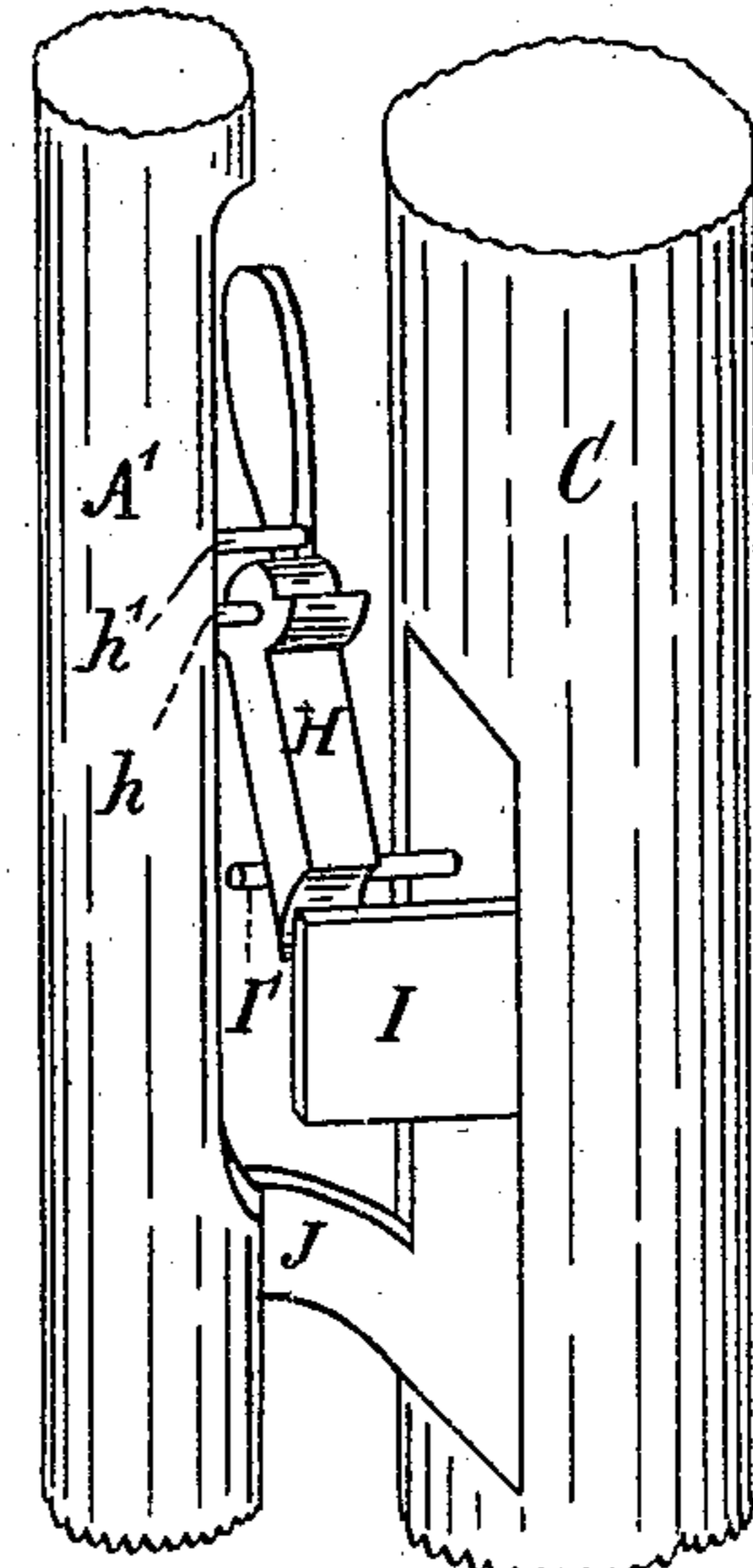
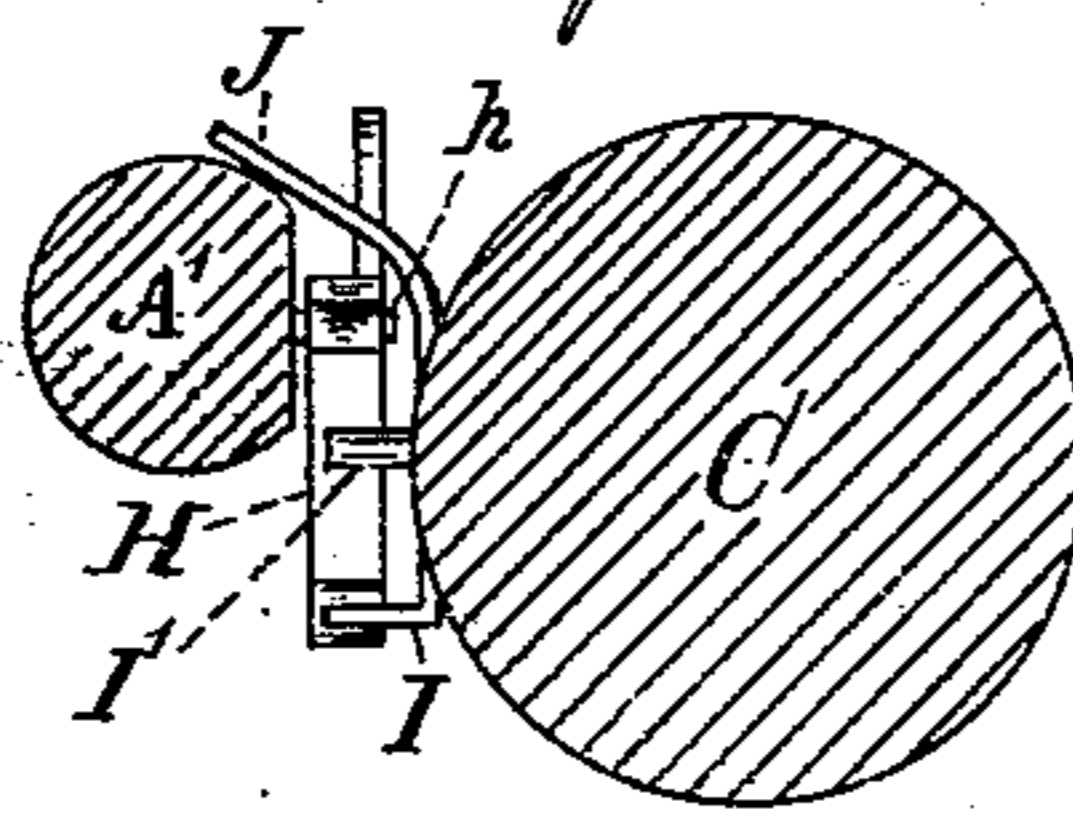


Fig. 5.



WITNESSES.

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UNITED STATES PATENT OFFICE.

ALBERT F. WEBB AND JOHN L. DUNCAN, OF FRANKLIN, INDIANA.

AUTOMATIC GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 226,577, dated April 13, 1880.

Application filed December 20, 1879.

To all whom it may concern:

Be it known that we, ALBERT F. WEBB and JOHN L. DUNCAN, of the city of Franklin, county of Johnson, and State of Indiana, have
5 invented certain new and useful Improvements in Automatic Gates, of which the following is a specification, reference being had to the accompanying drawings, which are made a part hereof, and on which similar letters of reference
10 indicate similar parts.

Figure 1 is a side elevation of our improved gate. Fig. 2 is a top or plan view thereof, showing at one point the gate closed and the latch mechanism holding the gate in that position, and at another point the several projections with which the gate and latch come in contact separately and apart from said gate and latch. Fig. 3 is an elevation of a portion of the front upright of the gate with the latch
15 proper thereon, but turned to one side, as when engaged with the catch. Fig. 4 is an elevation of that part of the post C which bears the several catch parts, and showing by dotted lines the relation of the latch thereto when the gate
20 is in a closed or open position. Fig. 5 is an under-side plan of the latch and catch mechanism, looking upwardly from the dotted section-line *xx*. Fig. 6 is an enlarged plan of the hinges and adjacent parts. Fig. 7 is a
25 perspective of the latch and catch mechanisms and those portions of the post and gate to which they are attached.

Our invention consists in the construction of an improved form of latch mechanism, and
35 in combining the same with a tilting gate, or one which is thrown out of balance by the movement of the gate-operating mechanism, and which, as well as the construction and operation of the several gate parts, will be
40 hereinafter more particularly described.

In the drawings, the portions marked A represent the gate proper; B, the post upon which it is hung; C, the post against which it shuts; D, the post against which it opens; E, the trip-
45 rods over which the wheels pass; F, the rods which reach from the trip-rods E to the gate; G, an upright rod or bar, so constructed as to form both hinge-pintles, and, when turned by the rod F, to throw the gate out of balance,
50 and thus cause it to open or close; H, a latch pivoted to the front upright, A', of the gate by

the pivot *h*; I, a catch, and I' a pin secured to the post C, a similar catch and pin being also placed on the post D; and J, projections on each of the two posts C and D, against
55 which the gate strikes as it closes or opens.

The gate A has two hinge-halves, *a a'*, secured to its rear upright, A², and the post B has two similar ones, *b b'*. The rod G passes through all the parts *a a' b b'*, as shown and
60 before stated. Between the upper set, *a b*, the rod bends in the form of a crank, and thus, when turned, throws the gate out of balance and causes it to open or close.

The latch H is so pivoted at *h* as to swing
65 nearly up to a horizontal level, when it comes in contact with a small stud, *h'*, which prevents it from swinging farther in that direction. When the gate is at rest, in an open or closed position, the base of said latch rests against
70 the catch I and its side upon the pin I', as shown by the dotted lines in Fig. 4. When the force is applied to the operating mechanism it tilts or lifts the gate high enough at the front end to raise the latch above the catch
75 and allow it to swing freely on its pivot, which releases the gate and allows it to open or close, as the case may be. One side of the latch being a counterpart of the other, and the catches on the post D being the same as those on the
80 post C, the latch operates equally well to hold the gate open as shut. Said latch is also extended far enough above the pivot *h* to form a handle, by which it may be easily uncatched and the gate opened by hand whenever it is
85 desired to so operate them.

The operation of our gate is as follows: The vehicle-wheel passes over the trip-rods E, turning it down, and thereby pushing the rod F in the usual manner. This operates, through the
90 projection *g*, to turn the rod G in the manner specified, and, through the crank formation of its upper end, tilt the gate so as to raise the latch out of the catch. The gate then falls open or shut by its own weight, and by the
95 peculiar bracing action of the latch is held firmly against the arrest-catch J and prevented from shaking or rattling.

Having thus fully described our said invention, what we claim as new, and desire to se-
100 cure by Letters Patent, is—

1. The combination, with the gate A and

tilting mechanism, as specified, of the arrest-
catch J and the vibrating latch, pivoted at h
in such manner and relation that its side shall
rest upon the pin I' and its base bear against
5 the projection I, substantially as shown and
described.

2. The combination, with the gate A and
tilting mechanism, of the vibrating latch H,
so pivoted that its side shall rest upon the pin
10 I' and its base bear against the projection I,
substantially as shown and set forth.

In witness whereof we have hereunto set
our hands and seals, at Indianapolis, Indiana,
this 11th day of December, A. D. 1879.

ALBERT F. WEBB. [L. S.]
JOHN L. DUNCAN. [L. S.]

In presence of—

C. BRADFORD,
WM. E. MOORE.