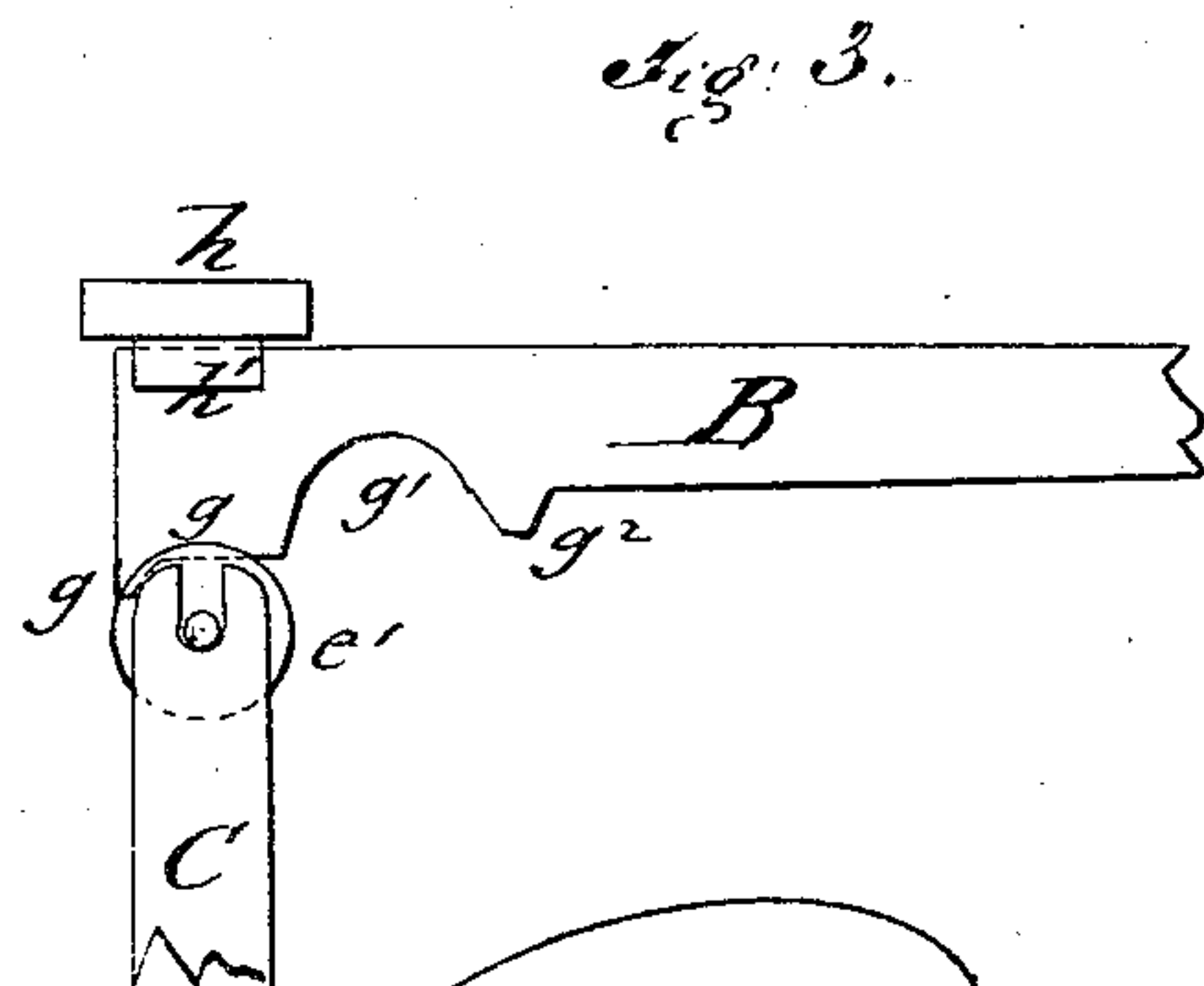
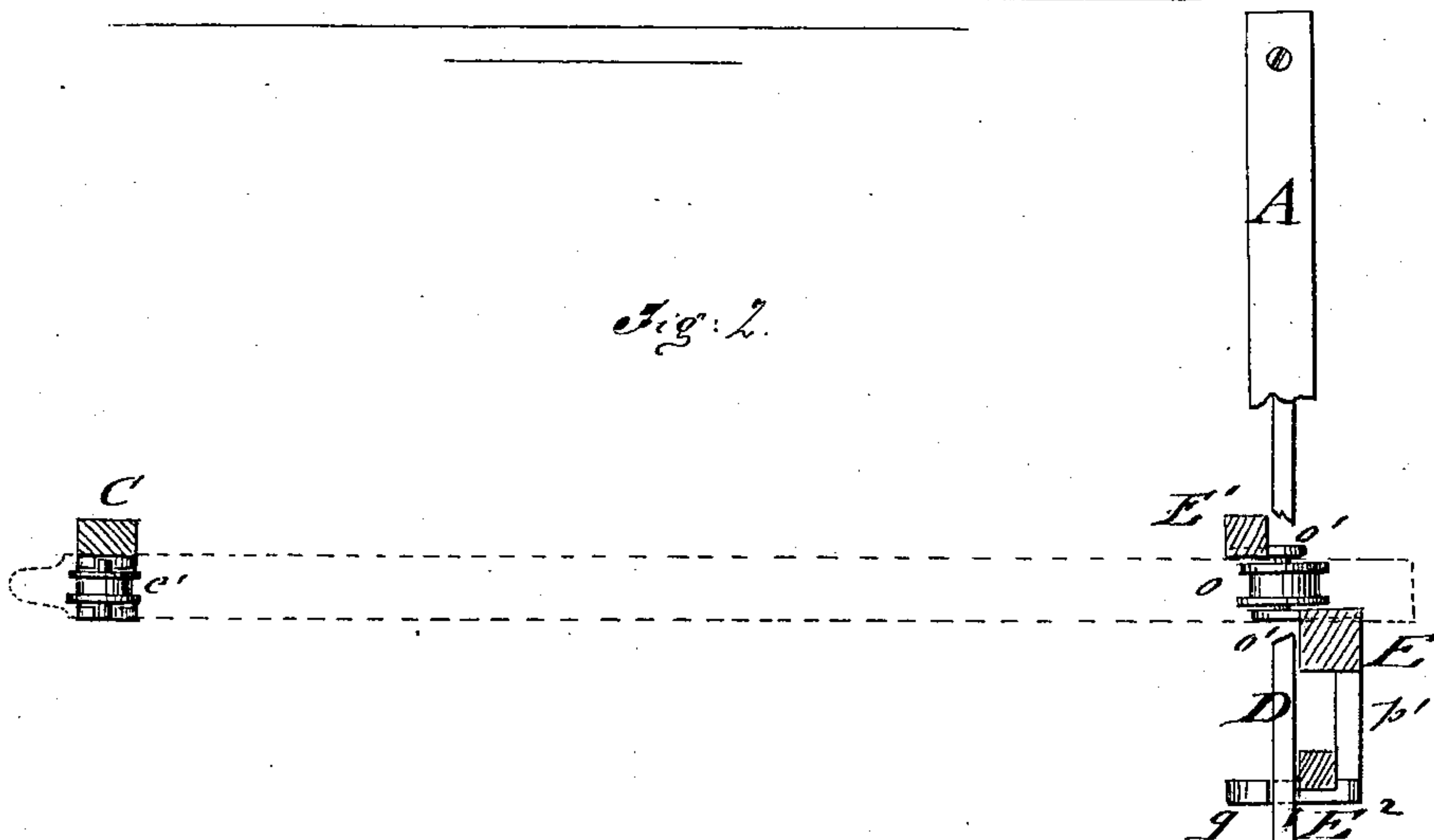
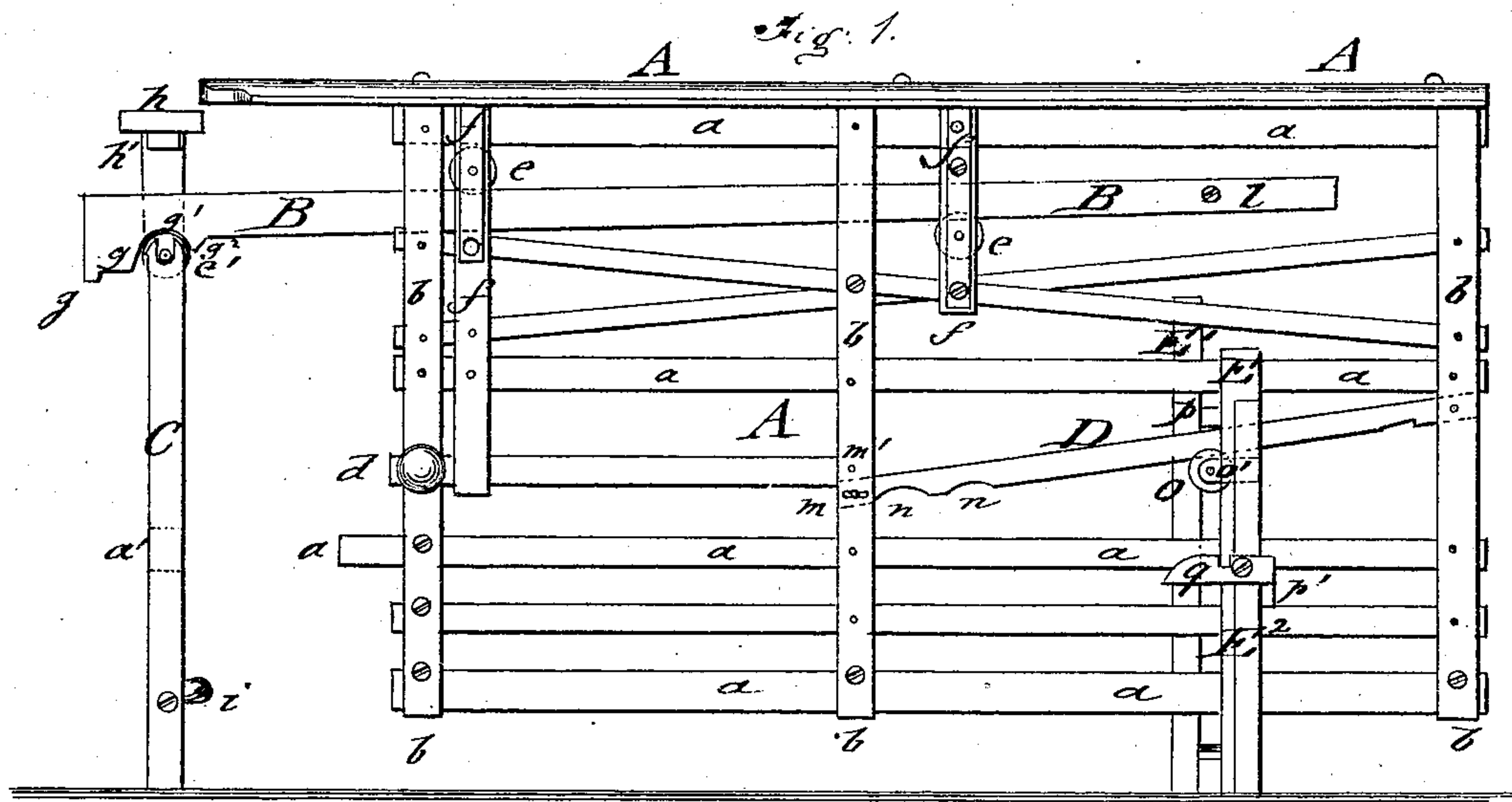


D. A. NEIDIG.
Farm-Gates.

No. 146,015.

Patented Dec. 30, 1873.



Witnesses:

Chas. Nida
Adgus et al

Inventor:

D. A. Neidig
M. H. Co

Per

Attorneys.

UNITED STATES PATENT OFFICE.

DAVID A. NEIDIG, OF PARIS, OHIO.

IMPROVEMENT IN FARM-GATES.

Specification forming part of Letters Patent No. **146,015**, dated December 30, 1873; application filed August 9, 1873.

To all whom it may concern:

Be it known that I, DAVID A. NEIDIG, of Paris, in the county of Stark and State of Ohio, have invented a new and Improved Gate, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a front elevation of my improved form of gate, shown partly opened; Fig. 2, a top view of the same, partly in section, to show gate swung open; and Fig. 3 is detail front view of the end of the supporting-rail when gate is in open position during the day.

Similar letters of reference indicate corresponding parts.

The object of my invention is to construct an improved gate for farmers and others, which combines features heretofore not produced in any gate, being self-closing and self-latching, and answering the purposes of a small farm-gate for the passage of persons on foot and horseback as well as those of a large farm-gate. The gate works easily and conveniently, is cheap and durable, and lifts clear above the snow.

The invention will first be fully described, and then pointed out in the claim.

In the drawing, A represents the gate; B, its supporting-rail; C, the main post, on which the same rests; D, the inclined rail; and E E¹, the diagonal posts between which the gate slides.

The gate A is constructed of longitudinal pieces *a*, firmly connected by double upright pieces *b*, of which the middle piece *b* is placed not centrally but sidewise nearer to main post C. The gate may be made of wood or iron, as desired. One of the horizontal pieces *a* projects near the bottom toward post C, and locks, on closing, into a slot, *a'*, of the same. Handles *d* of the forward pieces *b* serve to open the gate. The supporting-rail B slides over pulleys *e*, which turn in journals of double vertical pieces *f*, one of which is arranged near fore piece *b*, the other, by preference, centrally between the end pieces *b*. One pulley, *e*, is placed above, the other below, rail B, securing thereby a steady motion of gate A. Rail B is placed below the top rail of gate A, and at such height that any person or vehicle may pass below the same. The forward end of rail B is supported by post C, resting on a pulley,

e', of the same, and is provided with an outer projecting lug, *g*, a semicircular notch or recess, *g*¹, and an inner lug, *g*², as shown in Fig. 3. A top extension of post C carries a horizontal cap, *h*, with downward-projecting lug *h'*, which serves to lock rail B when placed in position, so that its outer lug *g* rests on pulley *e'*. A suitable cushion, *i*, at the lower end of post C softens the shock of the gate on closing. A pin, *l*, near the other end of rail B strikes against the central guide-piece *f*, and arrests thereby the motion of gate A. If the gate is moved farther or swung open the supporting rail follows then with it. The inner end of rail B is of wedge shape, and passes thereby freely, on closing, between the rear pieces *b* of the gate. The inclined rail D is preferably made of wood, with an iron band or strap at the lower side, and placed at suitable height between the upright, middle, and rear pieces *b*, being pivoted to the latter, and supported at variable inclination by means of an adjustable cross-pin, *m*, and holes *m'* of the former. Two indentations or notches, *n*—one larger, the other smaller—are provided at the lower end of rail D, and serve to retain the gate on these points. Rail D slides on pulley *o*, the shaft of which is carried in projecting bearings *o'* of diagonal posts E E¹. A lateral piece, *p*, is applied firmly to both posts E E¹ above rail D, and connects them near the top. A post, E², placed in front of post E, and connected by lateral pieces *p'*, carries a projecting hook, *q*, which locks on one of the longitudinal rails *a* of the gate when swung open.

When the gate is closed the supporting-rail extends through the full length of the gate, and rests with its semicircular notch or recess on the pulley of the main post. When pushed open to the side, the gate slides on the supporting and inclined rails, and returns, being self-closing and self-latching, into its former position. When it is desired to keep the gate open for ordinary purposes, during the day, it is pushed back till it rests on the longer notch or stop on the inclined rail, which raises also the forward end of the supporting-rail, and locks it into the top of the main post, bringing the gate to a level. In this position, the gate cannot be swung around, and in order to

do it, so as to make room for a load of hay or other bulky substance, it is necessary to push the gate into the second or shorter notch, which causes the forward end of the supporting-rail to drop into the semicircular recess, from which position it can easily be lifted and, the gate being properly balanced, swung around, resting them on the pulley between the diagonal posts and the hook of the auxiliary post.

Having thus described my invention, I claim

as new and desire to secure by Letters Patent—

The combination of supporting-rail B and inclined rail D, each sliding on a pulley, with main post C and auxiliary posts E E¹ E², as and for the purpose described.

DAVID A. NEIDIG.

Witnesses:

N. NEIDIG,
M. PAESSLEN.