

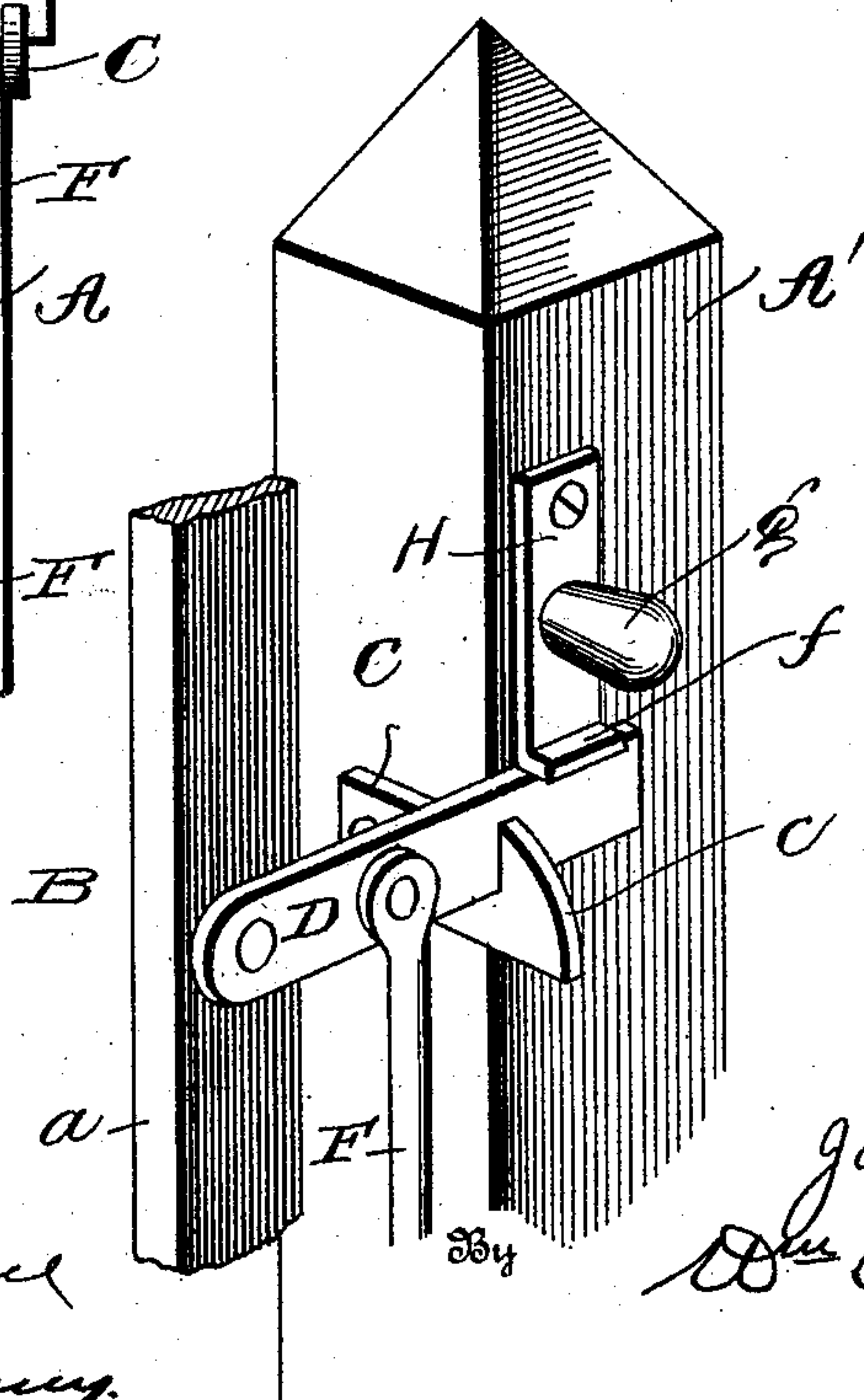
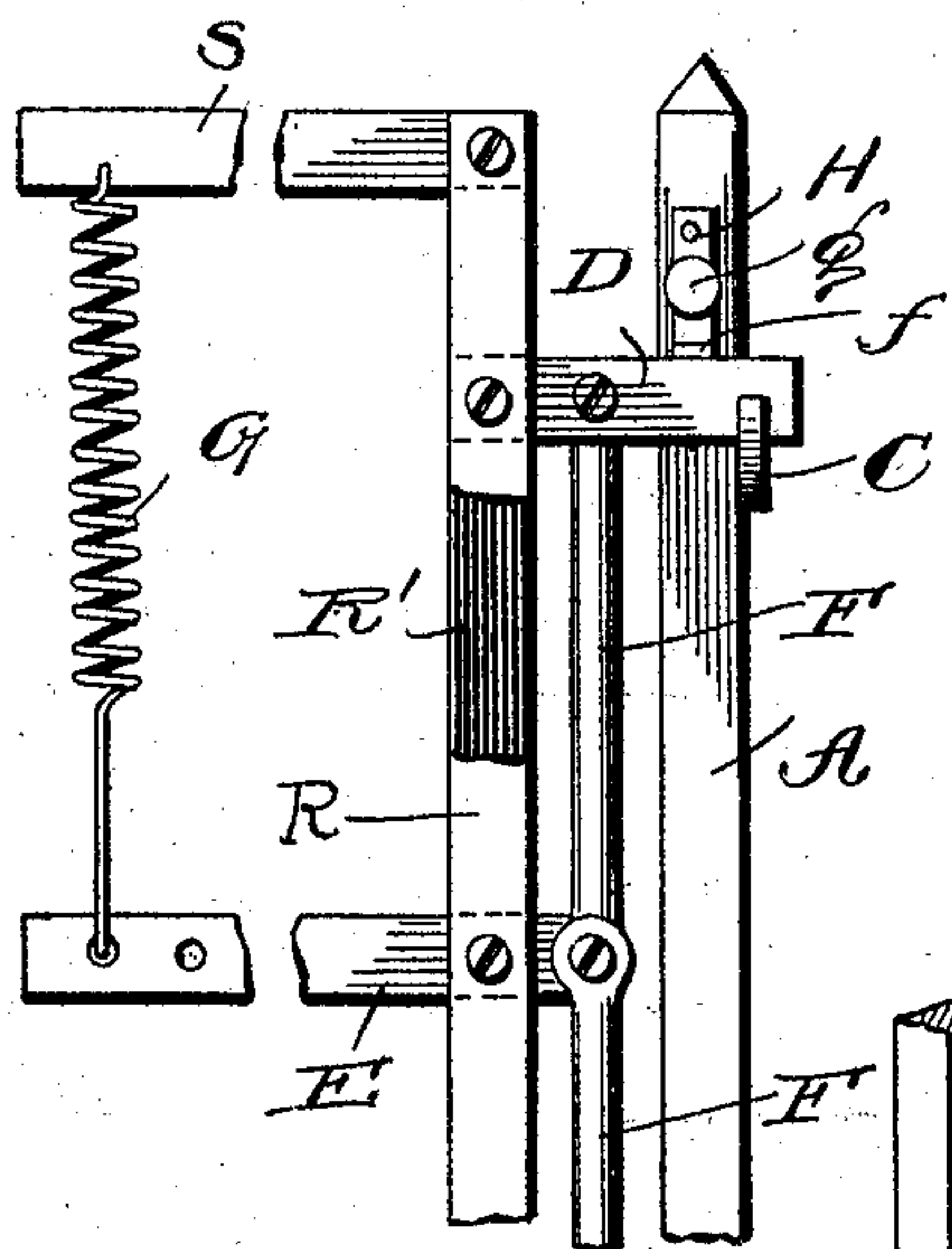
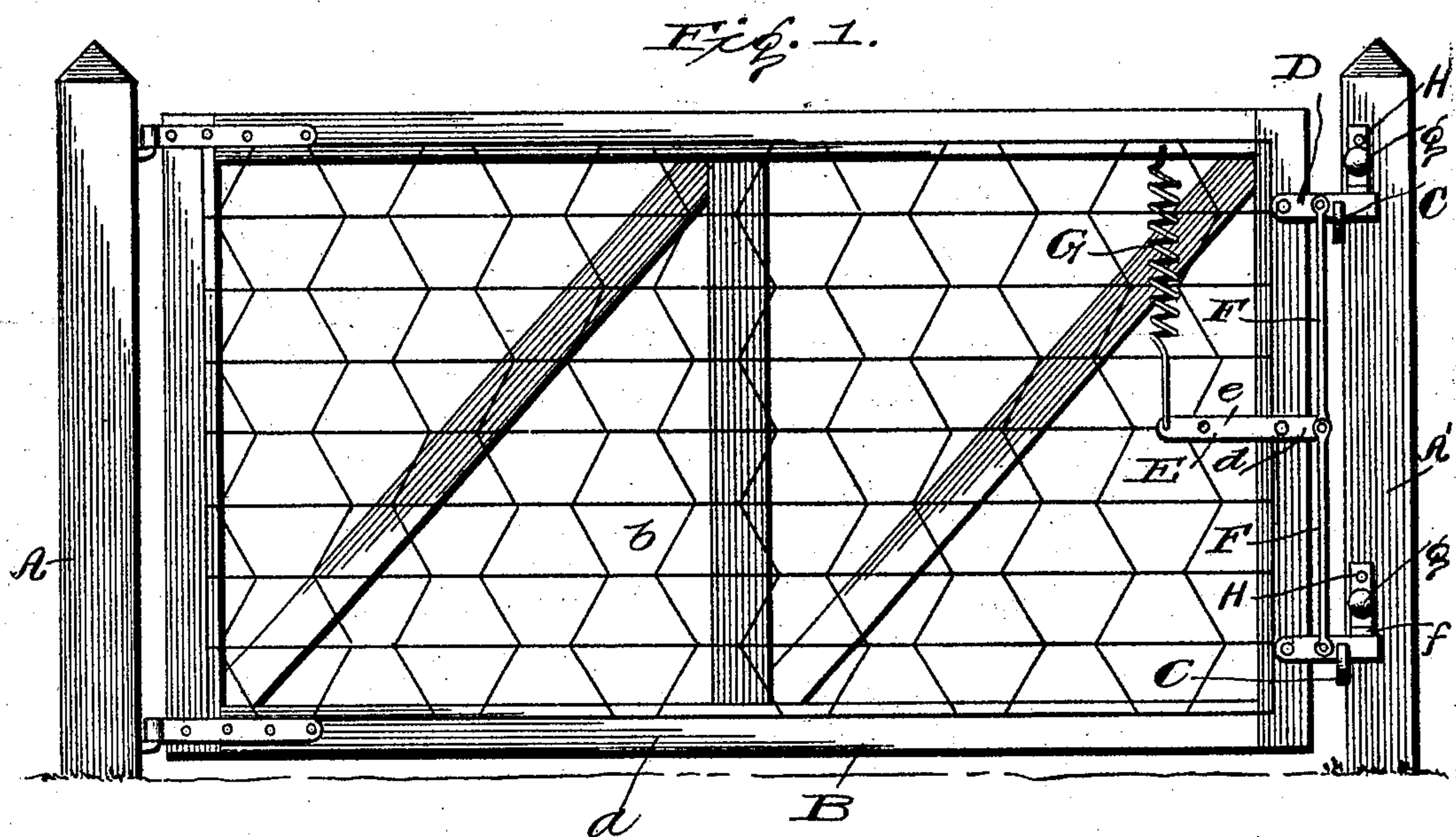
No. 805,937.

PATENTED NOV. 28, 1905.

J. H. SNYDER.

GATE LATCH.

APPLICATION FILED OCT. 18, 1904.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN H. SNYDER, OF MORENCI, MICHIGAN.

GATE-LATCH.

No. 805,937.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed October 18, 1904. Serial No. 228,949.

To all whom it may concern:

Be it known that I, JOHN H. SNYDER, a citizen of the United States, residing at Morenci, in the county of Lenawee and State of Michigan, have invented certain new and useful Improvements in Gate-Latches, of which the following is a specification.

My invention pertains to gate-latches; and it has for its object to provide a simple and strong latch adapted to securely hold in a closed position both the upper and lower portions of the swinging end of a gate and one which is calculated to effectually resist attempts of live stock to open the gate and yet may be quickly and easily manipulated by a person.

The invention will be fully understood from the following description and claim when taken in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a view illustrating a swinging gate equipped with my improved latch as secured in a closed position. Fig. 2 is an enlarged detail perspective view illustrating one of the latch-levers, the keeper complementary thereto, and the device for retaining the latch-lever in engagement with the keeper; and Fig. 3 is a modification of the means for securing the latch mechanism to the gate.

Similar letters designate corresponding parts in the different views of the drawings, referring to which—

A A' are gate-posts, and B is a gate hinged to the post A and arranged to swing horizontally toward and from the post A'. The gate in general may be of any construction suitable to the application and operation of my novel latch, although I prefer to employ a gate comprising a frame *a* and wire-netting *b* stretched over the frame, as shown, such a gate being at once inexpensive and strong and durable.

C C are lower and upper keepers fixed to the post A' and having beveled heads *c*.

D D are lower and upper latch-levers pivoted on the gate so as to swing vertically and arranged to ride over the beveled heads *c* of the keepers and drop back of said heads in the positions shown.

E is a vertically-swinging lever fulcrumed on the gate at a point about midway between the latch-levers and having a short outer arm *d* and a comparatively long inner arm *e*.

F F are links interposed between and connecting the arm *d* of the lever E and the latch-levers D.

G is a coiled spring connecting the long arm

e of the lever G and the gate at a point above said lever and tending to normally hold the lever G, the latch-levers C, and the parts connected therewith in the positions shown and return said parts to such positions when the same are released, and H H are lower and upper retainers, the office of which is to hold the latch-levers against casual disengagement from the keepers. The said retainers are pivoted on the post A' above the keepers C and are provided with angular lower ends *f* and handles *g*. It should be noted, however, that while the retainers are pivoted to post A' there is sufficient frictional contact between the retainers and the post to hold the former in oblique positions when they are placed in such positions to permit the latch-levers to freely ride into engagement with the keepers.

In virtue of the construction of my novel latch it will be observed that when the retainers H are in the oblique positions mentioned and the gate is swung closed the latch-levers will ride up and drop back of the keeper-heads *c* and be held in the latter position by the pull of the spring G, with the result that both the upper and lower portions of the swinging end of the gate will be held closed in a secure manner. It will also be observed that when the retainers H are swung down into engagement with the upper edges of the latch-levers all efforts of live stock to open the gate by pressing downwardly on the long arm *e* of the lever E will be futile. When, however, a person desires to open the gate, it is simply necessary for such person to move the lower retainer H with the foot and the upper retainer H with one hand into the oblique positions before mentioned and with the other hand press the long arm *e* of the lever E downwardly, when the latch-levers will be raised out of engagement with the heads of the keepers and the gate may be swung open.

In Fig. 3 there is shown a modified construction including vertical bars R and R', between which the latch-levers are secured at their rear ends, the vertically-swinging lever E being also secured near its outer end between said bars R and R'. Secured at the upper and lower ends of said bars R and R' are cross-bars S; but simply one of the cross-bars and latch-levers is shown in Fig. 3, it being deemed unnecessary to duplicate these elements, as they are clearly illustrated in the preferred embodiment of the invention. The vertical bars R and R' and cross-bars S are

carried by the gate in such manner as to properly register with the latch - holding means located on the post A'. The spring G instead of being secured at its upper end directly to the gate, as shown in the preferred form, is connected to the inner end of the top cross-bar S. It will be thus seen that by the use of the two additional elements described the operative parts of the device as a whole will be greatly strengthened, thereby increasing the life thereof.

It will be appreciated from the foregoing that while highly efficient for the purposes stated my novel gate-latch is simple and inexpensive in construction and at the same time strong and durable, and hence well adapted to withstand the rough usage to which gate-latches are ordinarily subjected.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

In a gate-latch, the combination of posts, a gate hinged to one of the posts, lower and up-

per keepers fixed to the other post, at right angles to the face thereof, and having beveled heads, lower and upwardly vertically swinging latch-levers pivoted to the gate and arranged parallel to the said face of the keeper-post in position to rest back of the heads of the keepers, a vertically-swinging lever pivoted to the gate, at a point between the latch-levers, links connecting one arm of said lever with the lower and upper latch-levers, a spring connecting the other arm of the lever and the gate at a point above the lever, and retainers pivoted on the said face of the keeper-post, above the keepers, and frictionally engaging the face, whereby they are adapted when raised out of engagement with the latch-levers to remain in such position.

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

JOHN H. SNYDER.

Witnesses:

LEON D. MOWRY,
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