(No Model.)

C. N. ELLIS.

GATE LATCH.

No. 411,955. Patented Oct. 1, 1889.

Fig 1.

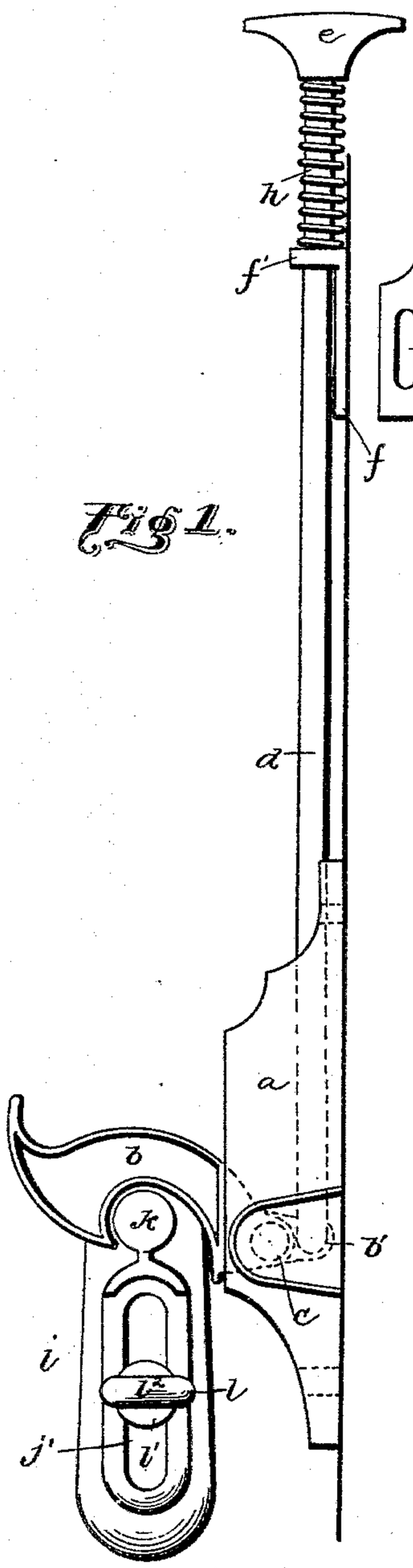


Fig 2.

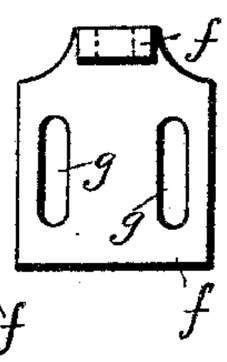


Fig 5.

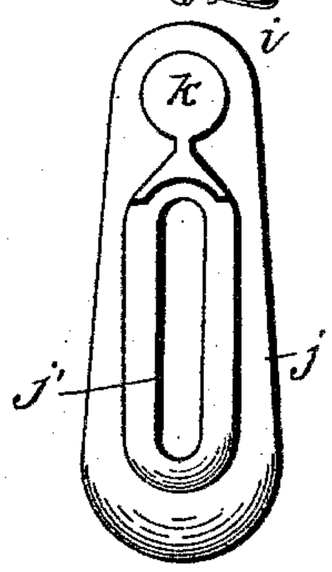


Fig 6.

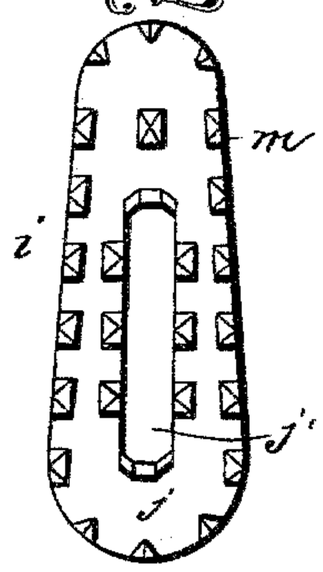


Fig 7.

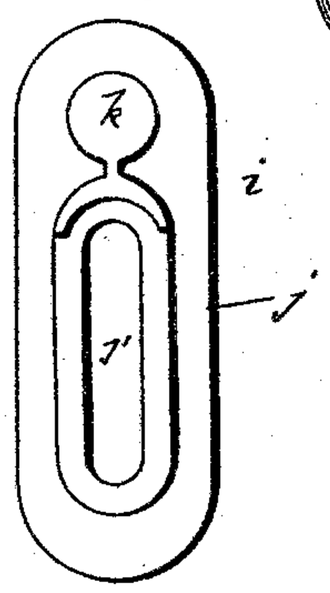


Fig 3.

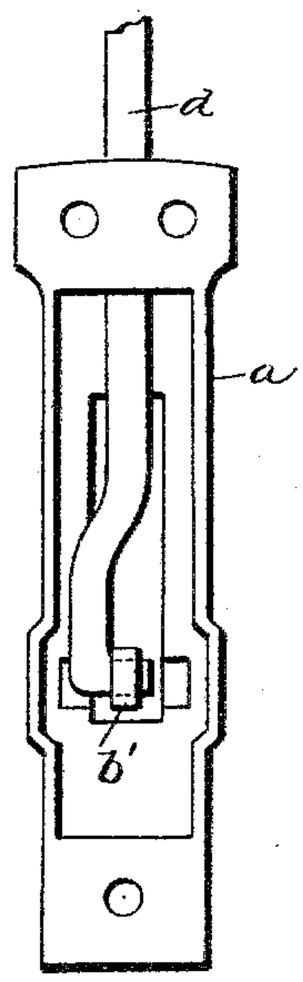
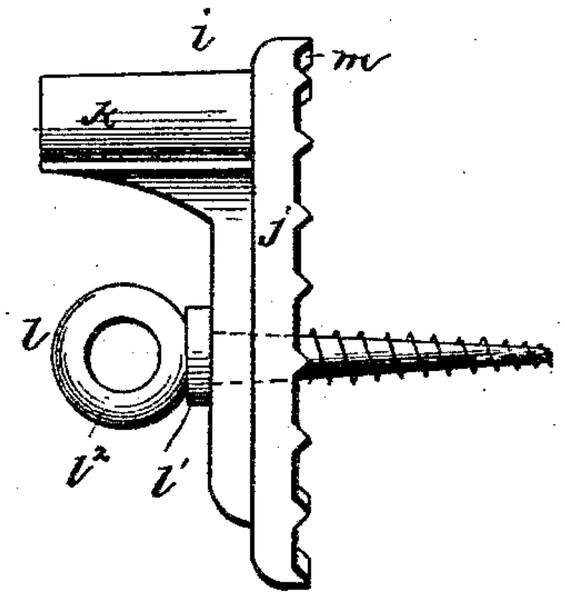


Fig 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES N. ELLIS, OF NEW ALBANY, INDIANA.

GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 411,955, dated October 1, 1889.

Application filed May 28, 1888. Serial No. 275,327. (No model.)

To all whom it may concern:

Be it known that I, CHARLES N. ELLIS, a citizen of the United States, residing at New Albany, in the county of Floyd and State of Indiana, have invented a certain new and useful Improvement in Gate-Latches, of which the following is a full, clear, and exact description.

This invention relates to latches or catches for gates.

The invention consists of a hooked lever held in engagement by a spring with a keeper or catch, the spring being arranged upon a rod and its tension made variable relatively thereto by an adjustable bracket for supporting the rod and spring, and the catch being made adjustable to suit the altitude of the hooked lever, all constructed and arranged substantially as hereinafter more particularly set forth and claimed.

For convenience, the hooked lever is hereinafter referred to as a "hook" and the catch or keeper as a "catch."

In the accompanying drawings, illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a side elevation. Fig. 2 is a front view of the rod-bracket. Fig. 3 is a rear view of the hook-casing. Fig. 4 is a side elevation of the catch. Fig. 5 is a front view. Fig. 6 is a rear view of the catch, and Fig. 7 is a front view of a slightly-modified shape of catch.

Any suitable cast-iron or other casing *a*, adapted to be attached to the fixed or moving parts of a gate, may be provided to receive a hook-shaped lever *b*, which is secured therein upon a pivotal bolt *c*. This "hook" *b* (so called, as before noted) has its shorter arm *b'* engaged by a rod *d*, which rod works in the casing, and is provided with a knob *e* at its upper end.

f is a bracket having a perforated arm *f'* projecting therefrom at right angles, to receive the upper end of the rod. The bracket *f* is made with longitudinal slots *g g*, through which screws or other detachable fastening devices are passed to secure the bracket in position. The arm *f'* also serves as a bearing to receive and support a coiled spring *h*, which encircles the rod between said arm and the knob on the rod and normally elevates said rod, and hence throws down into engaging position the hook *b*. The tension of the spring *h* may be varied by moving up or down the bracket *f*, the slots *g g* admitting of and being provided for such adjustment.

The catch *i* is composed of a base-plate *j* and an arm *k*, projecting therefrom, and which serves to engage with the hook *b*. The base-plate is slotted longitudinally, as at *j'*, to receive a fastening-screw *l*, by which the catch may be secured in position and be adjusted to the height of the hook.

The screw *l* is shown as comprising a threaded portion, a washer *l'*, and a head *l²*, so as respectively to enter the wood-work, bind against the base-plate, and be readily operated.

The base-plate *j* is provided on its rear surface with a suitable number of pointed studs *m*, which are forced into the part to which the catch is applied, and serve, in conjunction with the screw *l*, to hold the said catch in any given position. In Figs. 4 and 6 many such pointed studs are shown; but there may be a greater or less number.

Fig. 7 shows the catch with parallel sides, as being more economically constructed.

What I claim is—

1. The casing *a* and the hook *b*, pivoted therein, combined with the rod *d*, jointed to the hook and extended up out of the casing, the adjustable bracket *f*, and the spring *h*, interposed between said adjustable bracket and the rod-knob, substantially as shown and described.

2. The casing *a* and the hook *b*, pivoted therein, combined with the rod *d*, jointed to the hook and extended up out of the casing, the adjustable bracket *f*, and the spring *h*, interposed between said adjustable bracket and the rod-knob, and the adjustable catch *i*, having the projecting arm *k*, to be engaged by the hook, substantially as shown and described.

In testimony whereof I have hereunto set my hand this 22d day of May, A. D. 1888.

CHARLES N. ELLIS.

Witnesses:
HARRY A. BUERK,
HARRY M. TAYLOR.