

(Model.)

E. KNIGHT.

HASP LOCK.

No. 359,681.

Patented Mar. 22, 1887.

Fig. 1

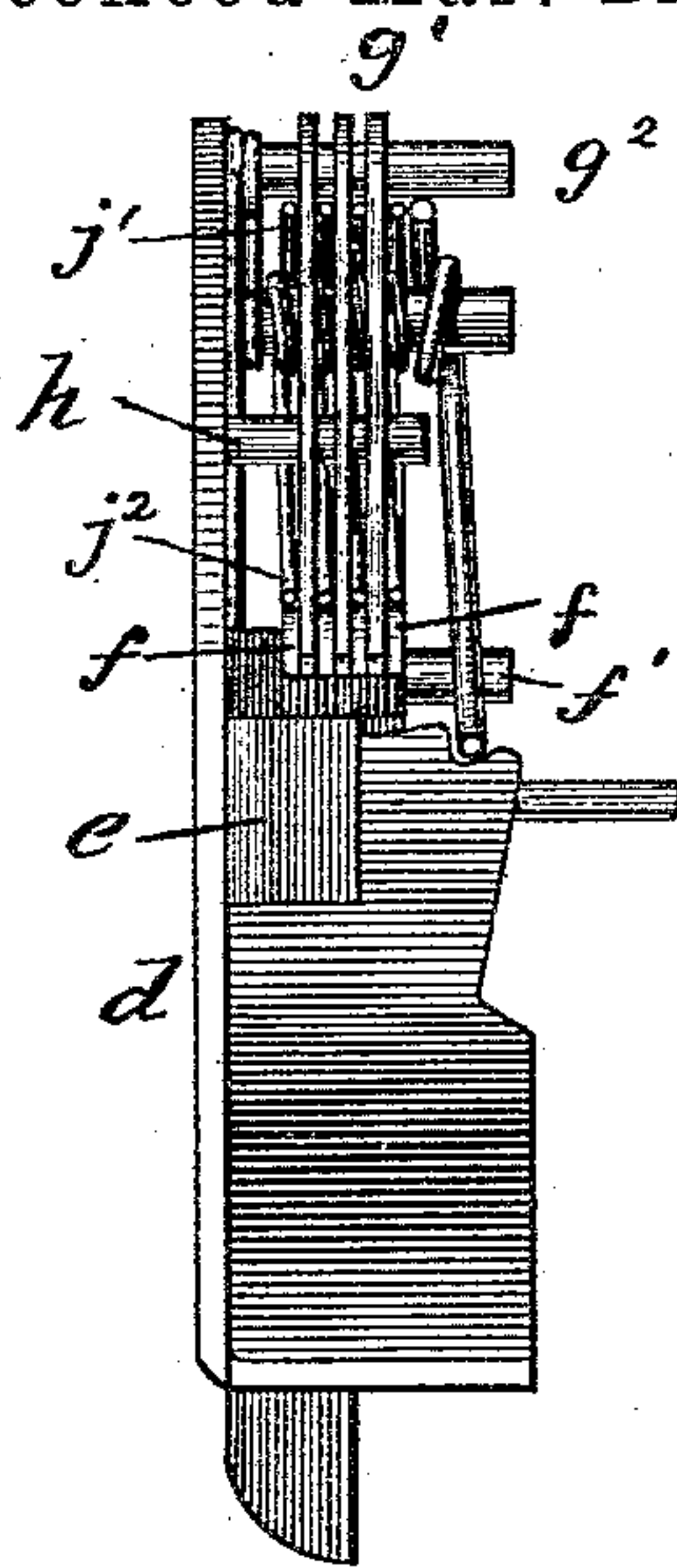
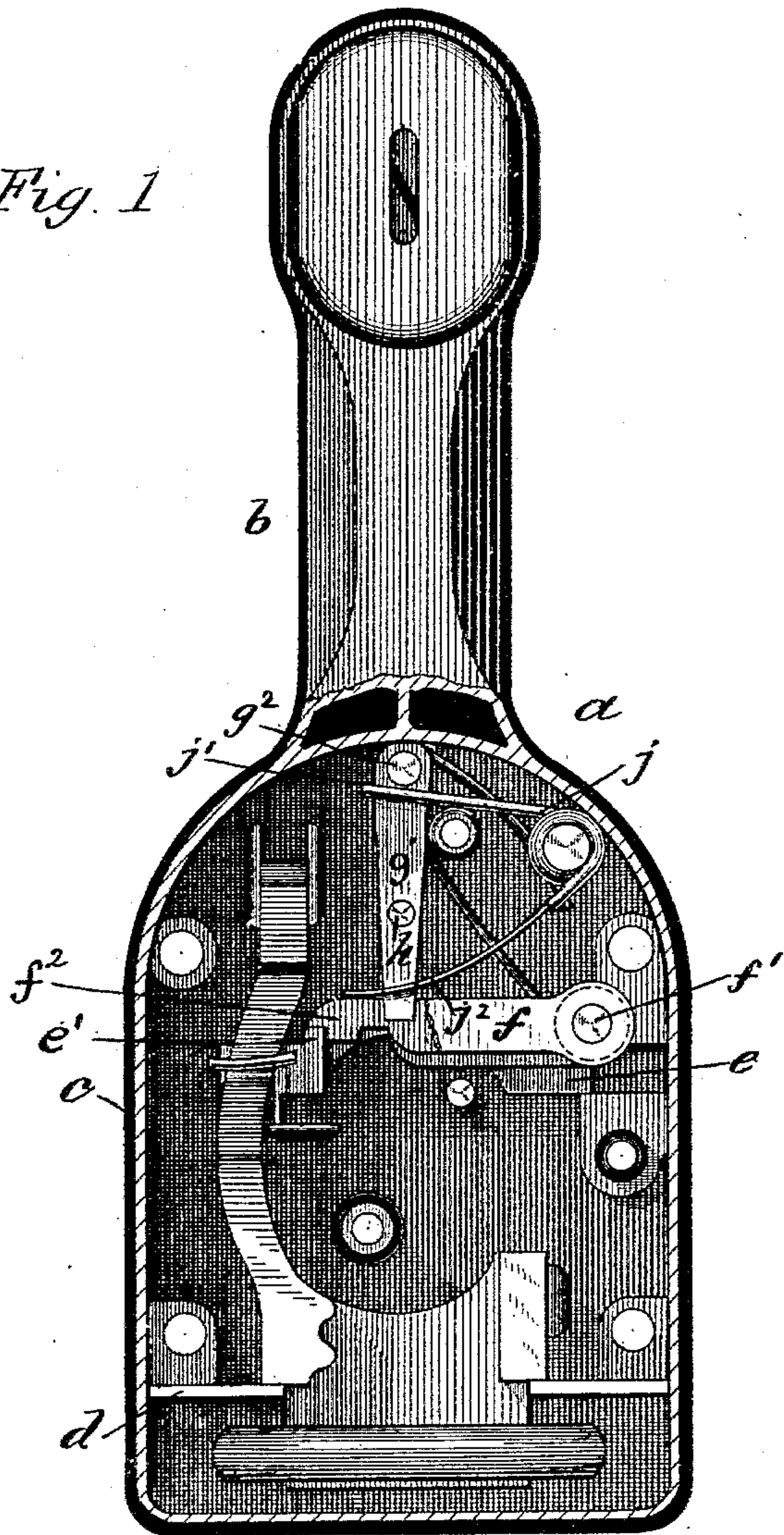


Fig. 3

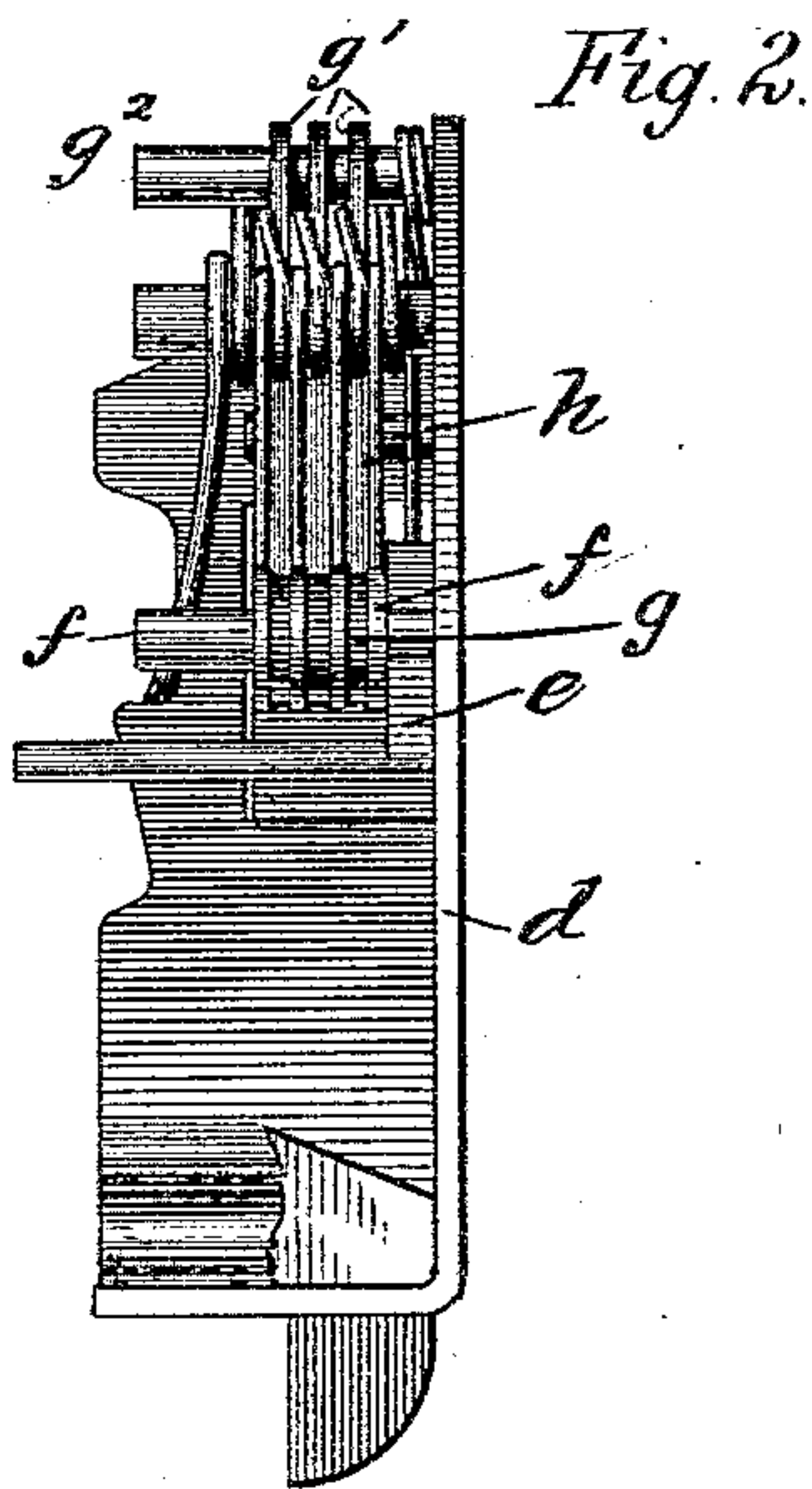


Fig. 2

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EDGAR KNIGHT, OF SAYBROOK, CONNECTICUT.

HASP-LOCK.

SPECIFICATION forming part of Letters Patent No. 359,681, dated March 22, 1887.

Application filed September 4, 1886. Serial No. 212,683. (Model.)

To all whom it may concern:

Be it known that I, EDGAR KNIGHT, of Saybrook, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Hasp-Locks, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

My invention relates, primarily, to a device known as a "hasp-lock," that consists of a shank-section with a pivot supported in one end of the same, and at the opposite end of said section a lock-receiving section consisting of an enlarged part that bears the lock mechanism.

The object of my improvement is to provide a lock of this general class that shall possess advantages in use over prior locks of this class and shall be free from objections present in such old devices.

My improvement consists in a lock having tumblers and separating-washers, whereby individual action and movement of the tumblers is insured; and it still further consists in the details of the several parts of the device and their combination, as more particularly hereinafter described, and pointed out in the claims.

Referring to the drawings, Figure 1 is a plan view of a hasp with a lock embodying my improvements, the case and cover-plates being cut away to show the lock mechanism. Fig. 2 is an edge view of the lock mechanism, looking from the right. Fig. 3 is a view of the mechanism, looking from the left.

In the accompanying drawings, the letter *a* denotes a hasp that consists of a metallic casing having a shank-section, *b*, and a lock-receiving section, *c*. Within the latter part the lock mechanism, that is attached to a lock-plate, *d*, is secured, as by means of screws that pass through suitable holes in the plate and take into threaded sockets in the walls of the casing.

The lock-bolt *e* is of ordinary construction and rests against lugs on the lock-plate, and between which it is free to move back and forth, except as held by the tumblers *f*. These tumblers are pivoted at one end on a pin, *f'*, and have each at the other end a blunt hook, *f''*, with vertical faces that are adapted to engage

the opposite faces of a lug, *e'*, that projects from the upper side of the bolt *e*. The several tumblers are separated at their pivot end by means of annular washers *g*, and at the hook end by the long flat washers *g'*, that I will term "strap-washers," to distinguish them from those at the opposite end of the tumblers. The several tumblers and the washers are built upon the supporting-pins in alternation, the upper ends of the strap-washers being provided with holes that enable them to fit upon the stump or pin *g''*, while the lower ends rest between the hooked ends of the tumblers, while near the back or upper edge of the tumblers another pin, *h*, is placed, that serves not only to support the strap-washers, but also the further function as a stop to prevent the picking of the lock, as will hereinafter be explained. A spring, *j*, is provided for each tumbler, and it consists of two arms, *j'* and *j''*, extending from the central coil that fits upon the spring-post *k*. The arms *j'* and *j''* of each spring lie in the chambers between the strap-washers, one end pressing against the pin *g''*, while the other presses its respective tumblers down toward the lock-bolt. By means of this construction the several tumblers are prevented from sticking together and a better and individual operation of each tumbler is practically insured. In forms of locks where the tumblers lie close upon each other they are apt to rust, so that the lifting of one lifts its neighbors, and thus interferes with the perfect operation of the lock parts. Such a fault is prevented by my improved construction.

With the hook-shaped tumblers—such as I use in the lock within described—the lock-bolt could be freed, provided they were all lifted so that the hooks would clear the lug, and this might be done with a plane or flat-edged bit if it were not for the stop-pin. When the stop-pin is present, as above described, an attempt to lift all of the tumblers with such a flat-bit-key would result in the back of the widest tumbler striking against the stop-pin, and the lifting of any more tumblers is prevented.

I claim as my improvement—

1. In a lock, in combination with a plural number of tumblers, the separating-washers extending between the tumblers for the limit

of their play, and forming chambers within which the ends of the tumbler-springs lie, all substantially as described.

2. In a lock, in combination with a plural
5 number of tumblers, a stop-pin located behind the tumblers and across their path, and limiting the movement of the tumblers away from the bolt, all substantially as described.

3. In a lock, in combination with a sliding

bolt and tumblers, these separating washers forming the spring-chambers, the tumbler-springs, and the pin *h*, that forms a support for the washers and a stop for the tumblers, all substantially as described.

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Witnesses:

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