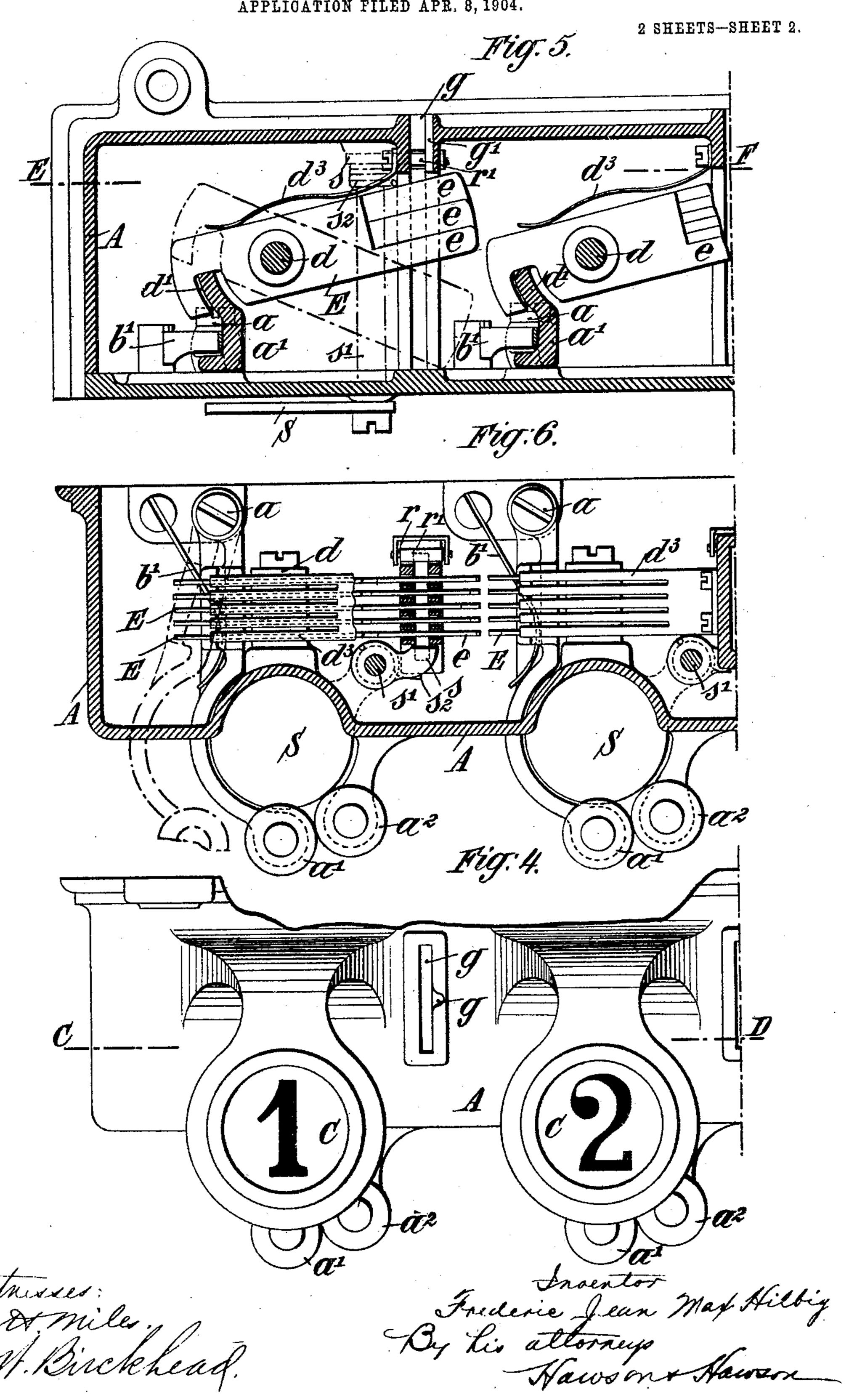
F. J. M. HILBIG.

SAFETY RETAINING DEVICE FOR UMBRELLAS, &c.

APPLICATION FILED APR. 8, 1904.

SHEETS-SHEET 1. Frederic Jean Max Hilling By his attorneys Howen

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UNITED STATES PATENT OFFICE.

FRÉDÉRIC JEAN MAX HILBIG, OF PARIS, FRANCE.

SAFETY RETAINING DEVICE FOR UMBRELLAS, &c.

No. 799,565.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I. Frédéric Jean Max Hilbig, engineer, a subject of the German Emperor, residing at Paris, France, have in-5 vented a Safety Retaining Device for Umbrellas, &c., of which the following is a specification.

This invention has reference to a safety retaining device for umbrellas, walking-sticks, 10 cycles, and the like.

In the accompanying drawings, Figure 1 shows in end elevation, upon a small scale, the device as a whole. Fig. 2 is a fragmentary elevation of the principal part of a device 15 comprising several retainers. Fig. 3 is a cross-section on the line A B of Fig. 2. Fig. 4 is a corresponding plan view. Fig. 5 is a vertical longitudinal section on the line C D of Fig. 4. Fig. 6 is a horizontal section on 20 the line E F of Fig. 5. Fig. 7 shows separately the key employed with this improved

retaining device.

The improved retaining device comprises jaws $a'a^2$ in the form of a semicircle and form-25 ing part of a box A, a plate C, situated above | Upon this same pin is mounted a blade S, l, presenting the form of a funnel and serving for the reception of the end of the umbrellas or sticks and for retaining them in place. 30 The locking mechanism for the jaws a' a^2 is adapted to be actuated by a suitable key, which acts merely by pressure and is engaged in the box at the top. One of the jaws—the jaw a^2 —is made rigid with the front of the box A, 35 while the other jaw a', which is articulated at a within this box, is submitted to the action of a spring b' constantly tending to bring it against the jaw a^2 . Opposite the projecting portion of the jaws is arranged a cavity of 40 semicylindrical form, which, together with the said jaws, constitutes, so to speak, a cylindrical case surmounted by the said plate C, upon which is engraved a serial number or other convenient reference-sign.

The locking of the movable jaw a' is obtained by means of plates E to any suitable number, which pivot around a common pin e and engage at d' with a portion of the jaw presenting the form of the arc of a circle de-5° scribed from the center of the pin d. All these plates are submitted to the action of independent antagonistic springs d^3 and are cut, on the end opposite that on which their engaging hook is situated, in the form of 55 tongues e. The manner in which these plates are cut is such that as a whole they present |

in end elevation, Fig. 3, a series of steps which must be reproduced upon the end of the key B, Fig. 7, in order that this latter may be able to act simultaneously upon all 60 the blades, rock them, and produce disengagement. This stepwise arrangement of the plates E will of course vary in such retaining device, which is thus furnished with a combination which is peculiar to itself and which 65 must be reproduced upon the key to enable it to act.

It will be noticed that in all cases the key acts merely by pressure in order to effect the unlocking. The normal introduction of the 70 key in the opening g is effected by means of a tongue h', which should correspond with a notch g' of the opening g. The key is lightly retained in this opening by means of a spring r, the extremity r' of which engages in a cor- 75 responding notch h^2 , formed upon the edge of the key. Finally, the key is retained in the safety device when this latter is not holding any article by means of a tongue s on a pin e', submitted to the action of a spring s^2 . 80 this box A, a cup k, surmounted by a collar | which normally closes the bottom of the cylindrical case previously mentioned, but which when a stick or umbrella is placed in position yields and causes the pin s', and with it the 85 tongue s, which releases the key, to rotate slightly. The withdrawal of the key produces the immediate locking of the movable jaw a^2 , and the object placed in position is secured. It can only be withdrawn by intro- 90 ducing the key afresh, so as to effect unlocking.

> It will of course be understood that the forms and dimensions of the safety device may vary as desired and that its casing may 95 be ornamented to a greater or less extent.

I claim as my invention—

1. In a locking device comprising a casing, a movable jaw and a key in combination with a pivoted member, one end of which is adapt- 100 ed to lock the inserted key when the locking device is not in use, the opposite end covering the space inclosed by the movable jaw.

2. A locking device, comprising a casing, a movable jaw, tumbler-blades adapted to en- 105 gage it, a key, and a tongue adapted to lock the inserted key upon the movement of said jaw, in combination with a blade adapted to be projected toward the space inclosed by said jaw when the space is vacant.

3. A locking device, comprising a casing, a pivoted jaw, a spring therefor, a number of

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pivoted tumbler-blades adapted to engage it, the casing provided with a keyhole for the direct insertion of a key, a pivoted lever and a key-locking tongue, said lever adapted to 5 be operated by the insertion of an article

within the jaw.

4. A locking device, comprising a casing, a pivoted jaw, a spring therefor, a number of pivoted tumbler-blades adapted to engage it, the casing provided with a keyhole for the direct insertion of a key, a pivoted lever and a key-locking tongue, said lever adapted to be operated by the insertion of an article within the jaw, in combination with a blade

on said lever adapted to assume a position 15 within the jaw when said position is vacant.

5. In a locking device, comprising a casing, a movable jaw, and a key in combination with means adapted to retain the inserted key when the space inclosed by the movable jaw is va-20 cant.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRÉDÉRIC JEAN MAX HILBIG.

Witnesses:

Léon Francken, Hanson C. Coxe.