H. F. JONES.

POCKET IGNITER.

APPLICATION FILED MAR. 11, 1910.

970,506.

Patented Sept. 20, 1910

Fig. 1.

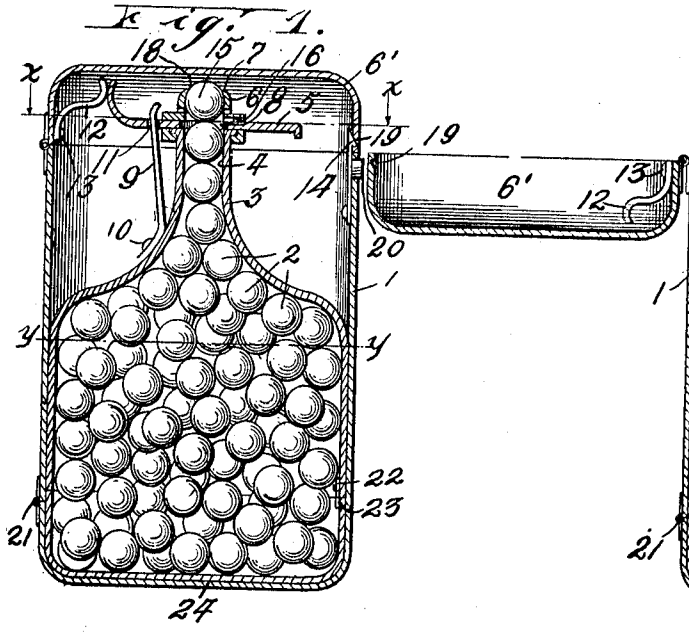


Fig. 2.

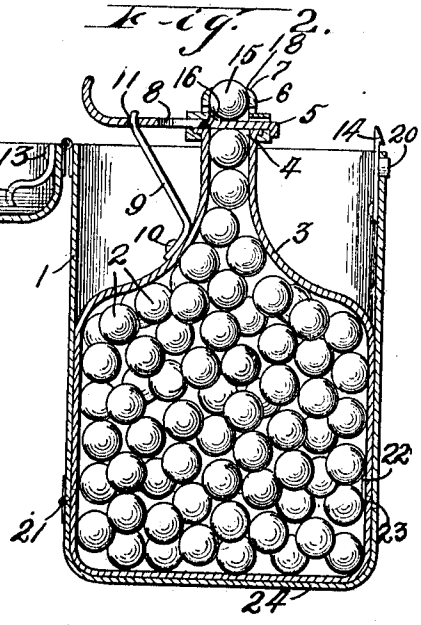


Fig. 3.

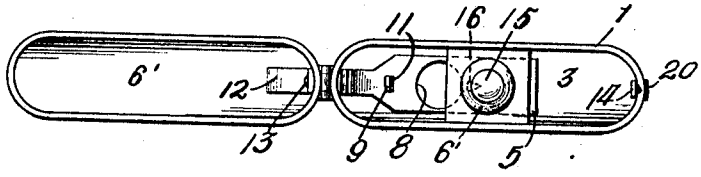


Fig. 4.

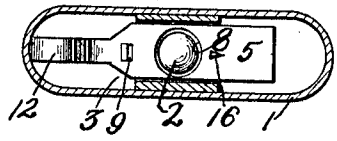
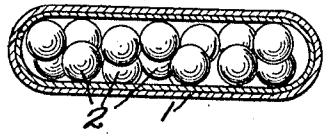


Fig. 5.



Witnesses

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HERBERT F. JONES, OF OCONTO, WISCONSIN.

POCKET-IGNITER.

970,506. Specification of Letters Patent. **Patented Sept. 20, 1910.**

Application filed March 11, 1910. Serial No. 548,653.

To all whom it may concern:

Be it known that I, HERBERT F. JONES, a citizen of the United States, residing at Oconto, county of Oconto, and State of Wisconsin, have invented new and useful Improvements in Pocket-Igniters, of which the following is a specification.

My invention relates to improvements in devices for storing and igniting combustible materials, which are put up in spherical form or so called pellets and it pertains more especially, among other things, to the mechanism for simultaneously igniting the pellet as the cover of the containing receptacle is released and thrown open.

The construction of my device is explained by reference to the accompanying drawings, in which—

Figure 1 represents a vertical section thereof, as it appears when the cover is closed. Fig. 2 is a vertical section of the device as it appears when the cover is in its open position. Fig. 3 is a top view of the receptacle as it appears when the cover is thrown open. Fig. 4 is a transverse section, drawn on line *x*—*x* of Fig. 1, and Fig. 5 is a transverse section, drawn on line *y*—*y* of Fig. 1.

Like parts are identified by the same reference numerals throughout the several views.

1 is a receptacle in which the pellets 2 are stored preparatory to use. The receptacle 1 is provided with a funnel 3 by which, when the receptacle is inverted, the pellets are caused to move of their own gravity in a single series through the discharge passage 4.

5 is a slidable partition, by which when the cover 6′ is thrown back to its open position as shown in Figs. 2 and 3, the discharge end of the funnel 3 is closed.

6 is a cage, comprising a plurality of inwardly converging fingers 7, which cage is provided for the reception of a single pellet preparatory to being ignited. The partition 5 is provided with an aperture 8 through which the pellets pass, one at a time, from the receptable 1 into the cage 6, when the cover 6′ is in its closed position, as shown in Figs. 1 and 4.

9 is a spring by which the partition 5 is actuated. The spring 9 is rigidly connected at one end with the funnel 3 by the rivet 10, and at its opposite end with the partition 5 operating in the aperture 11.

12 is an actuating arm, which is rigidly connected at one end to the side of the cover 6′ by a rivet 13, and at its opposite end is adapted to bear against one end of the sliding partition 5 and such parts are so arranged that when the cover is closed, the slidable partition 5 is moved from the position shown in Fig. 2 to that shown in Fig. 1, whereby the aperture 8 is brought into alinement with the discharge end of the funnel 3, when, the receptacle being inverted, one of the pellets is permitted to drop through said aperture of its own gravity into the cage 6, as previously stated.

It will be understood that the slidable partition 5 is retained in the position shown in Fig. 1 against the recoil of the spring 9, so long as the cover is retained in its closed position. When, however, the cover is released from the retaining catch 14, it is thrown back to its open position by the recoil of said spring 9, while said slidable partition 5 is thrown from the position shown in Fig. 1 to that shown in Fig. 2, whereby the unperforated part of said partition is brought between the upper pellet 15 and the pellets below, preparatory to said upper pellet being ignited. It will also be understood that the partition 5, when in such position, serves to prevent the pellets below the partition from becoming ignited from the one above. The partition 5 is preferably provided with a sharp metallic projection 16, which is adapted to contact with the pellet as said partition is thrown toward the left by the recoil of said spring 9, and said partition is preferably tapered from the aperture 8 upwardly toward the right, whereby it passes more freely between the next two adjacent pellets, and whereby the upper pellet is forced by the wedge action of said partition against the converging points 18 of said fingers 7, when the converging points 18 of the fingers and the point 16 of the partition coöperate to produce the required friction for igniting the pellet 15, as the cover 6′ is thrown back by the recoil of said spring. The cover 6′ is provided with a notch 19 for the reception of the catch 14, whereby said cover is retained in its closed position. 20 is a push button, which is supported in the wall of the receptacle 1 and is adapted to bear at its inner end against the side of said spring catch 14, while the outer end is in a convenient position to be actuated by the thumb of

the operator against the same, preparatory to opening the igniter. For convenience in placing the pellets in the receptacle, the end member 24 is removably connected to the receptacle by a hinge 21 and the opposite side of said receptacle is provided with a spring catch 22, which is adapted to engage in the recess 23 of said end member, whereby said end member is retained in its closed position. It will be understood that preparatory to operating the device, it is held in an inverted position, whereby one of the pellets passes through said aperture from said receptacle into the cage, when the cover is released by the pressure applied against the push button 20, the cover is thrown back by the recoil of said spring and the partition 5 is brought beneath the pellet which has passed into said cage and the pellet is thereby ignited, preparatory to being used for lighting cigars and for similar purposes.

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

1. In a device of the described class, the combination of a receptacle for combustible pellets, a funnel located in said receptacle having converging walls forming a passage for a series of said pellets, a cage located at the discharge end of said passage adapted to admit but one pellet at a time, a slidable partition supported from the upper end of said funnel provided with an aperture for the passage of said pellets, said partition being interposed between the discharge end of said passage and said cage, a cover hinged at one side to said receptacle, means connected with said cover for moving said slidable partition in one direction, a spring connected with said funnel and adapted to move said partition in the opposite direction, and means for igniting a pellet in said cage as said partition is moved by said spring.

2. In a device of the described class, the combination of a receptacle for combustible pellets, a funnel located in said receptacle having converging walls forming a passage for a series of said pellets, a cage located at the discharge end of said passage adapted to admit but one pellet at a time, a slidable partition supported from said funnel provided with an aperture for the passage of said pellets, said partition being interposed between the discharge end of said passage and said cage, a cover hinged at one side to said receptacle, an arm rigidly connected with said cover and adapted as said cover is closed to move said partition in one direction, a catch for retaining said cover in its closed position, a push button for releasing said catch and cover, a spring supported from said funnel for throwing said cover into its open position and simultaneously moving said partition and means for igniting said pellets and simultaneously closing communication between the ignited pellets in said cage and those in said receptacle.

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

HERBERT F. JONES.

Witnesses:
C. M. Hill,
Eva A. Trudell.