Jan. 24, 1928.

1,657,435

A. H. METCALF

CIGAR LIGHTER

Filed March 19, 1927

FIG. 1

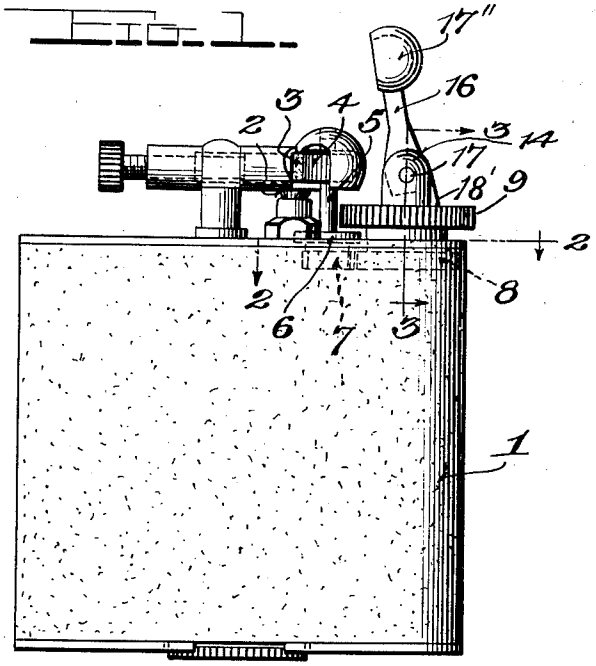


FIG. 2

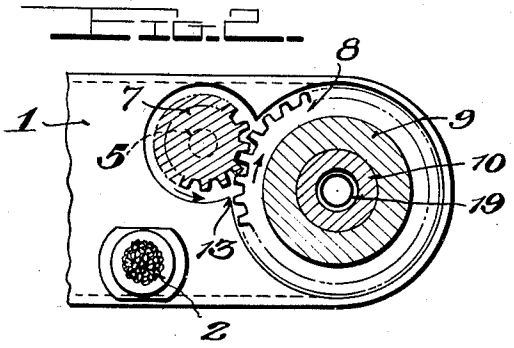
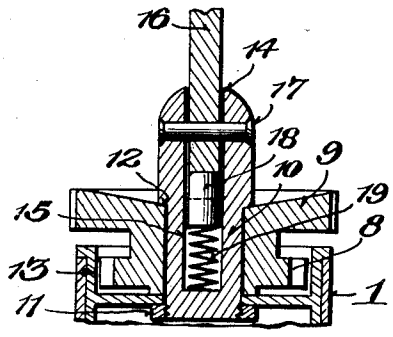


FIG. 3



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UNITED STATES PATENT OFFICE.

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CIGAR LIGHTER.

Application filed March 19, 1927. Serial No. 176,624.

The invention relates to certain new and useful improvements in cigar lighters, and the primary object thereof is to provide improved means for operating the wheel that engages the flint in creating a spark, and more especially to provide a means of this character which is operated by an element separate and spaced from the wheel, thereby to avoid contact of the fingers with the spark creating wheel.

A further object of the invention is to provide a device of this character wherein the means for mounting the spark creating wheel acts as a support for a snuffer.

Still further, the invention aims to provide a device of this type wherein the parts are all compactly assembled and can be economically produced.

The invention has further and other objects which will be later set forth and manifested in the course of the following description.

In the drawings:—

Fig. 1 is a side elevation of the invention;

Fig. 2 is an enlarged section on line 2—2 of Fig. 1 and

Fig. 3 is a like view on line 3—3 of Fig. 1.

In proceeding in accordance with the present invention, a casing 1 is provided which is equipped with the usual wick 2 and flint rod 3, the latter being engageable with a wheel 4, that has frictional contact with the flint rod, the wheel 4 is mounted on a shaft 5 that is journaled in the casing and is provided with a stop collar 6 seated on the top of the casing while the lower end of the shaft is provided with a gear 7 arranged adjacent the casing top. The gear 7 meshes with a gear 8 integrally formed with a finger engaging wheel 9, the latter having a knurled periphery. The wheel 9 and its gear 8 are rotatably mounted on a stub shaft 10, the shaft 10 being equipped with a nut 11 which engages the underface of the top of the casing so as to secure the stub shaft in position. The stub-shaft is provided with a shoulder 12 which engages the upper face of the wheel 9 and restricts upward movement of the latter. Preferably and as shown in Figs. 2 and 3 the top of the casing is sunken or depressed at 13 to receive the gears 7 and 8. The stub shaft has its upper end split at 14 and is provided with a hollowed out portion 15 below the split. A snuffer 16 is pivoted at 17 to and within the split portion 14 and is movable about its pivot so as to move its snuffing cap 17″ into and out of engagement with the wick 2. The snuffer 16 has a tail 18′ which enables same to be held in inoperative position and is tensioned by means of a sliding pin 18 which latter is engaged by a coil spring 19, the parts 18 and 19 being mounted in the hollowed out portion 15 of the stub shaft 10.

From the foregoing, it will be seen that the finger engaging wheel 9 through its gear 8 drives the gear 7, and thereby shaft 5 and the sparking wheel 4. With this structure the fingers of the operator are not brought into contact with the sparking wheel and in addition a larger diametered hand wheel can be employed. In further addition it will be noted that the gear 7 is of considerably less diameter than the gear 8, consequently it will be driven at a greater speed than the gear 8, which results in the quicker production of a spark and with less effort. It will further be noted that due to the mounting of the snuffer on the mounting of the wheel 9 and its gear 8, compact assemblage of the parts is had.

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

1. In a cigar lighter, a casing, a flint carrier on the casing, a sparking wheel, a shaft journaled on the casing and carrying said wheel, a gear on said shaft, a stub shaft rigid on the casing and having a split outer end with a hollow part beneath the split part, a finger engaging wheel carried by the stub shaft, a gear integral with the finger engaging wheel and in mesh with the first named gear, a snuffer pivoted in the split end of the stub shaft, and a spring pressed pin in the hollow part of the stub shaft to tension the snuffer.

2. In a cigar lighter, a casing, a flint carrier on the casing, a sparking wheel, a shaft journaled on the casing and carrying said wheel, a gear on the shaft, a stub shaft rigid on the casing, a finger engaging wheel carried by the stub shaft, and a gear carried by the finger engaging wheel and in mesh with the first named gear.

3. In a cigar lighter, a casing, a flint carrier on the casing, a sparking wheel, a shaft journaled on the casing and carrying said wheel, a gear on the shaft, a stub shaft rigid on the casing, a finger engaging wheel car-

ried by the stub shaft, a gear carried by the finger engaging wheel and a mesh with the first named gear, and a snuffer carried by the stub shaft.

4. In a cigar lighter, a casing, spark producing means including a rotatable wheel disposed above the casing top, a gear connected to the wheel to rotate therewith and located below the wheel, a finger engaging wheel, and a gear connected to the finger engaging wheel to rotate therewith and being in mesh with the first named gear to rotate the latter and thereby the wheel of the spark producing means.

5. In a cigar lighter, a casing, spark producing means including a rotatable wheel, a shaft on the casing having a split part and a hollow part, means on the shaft to actuate the rotatable wheel, a snuffer pivoted in the split part of the shaft, and spring pressed means in the hollow part of the shaft to tension the snuffer.

6. In a cigar lighter, a casing, a shaft carried by the casing and extending longitudinally thereof, a finger engaging wheel rotatable on the shaft and having a gear on its lower end, a second shaft parallel to the first shaft and having a sparking wheel thereon located above the finger engaging wheel, a gear connected to the sparking wheel and in mesh with the gear of the finger engaging wheel, and a flint element to engage the sparking wheel.

7. In a cigar lighter, a casing having a depression in its top, a shaft carried by the casing and extending through the depression, a finger engaging wheel having a gear connected thereto rotatable on the shaft, said gear being disposed in the depression and the wheel projecting above the casing top, spark-producing means including a rotatable wheel having a gear connected thereto and in mesh with the gear of the finger engaging wheel, and means to rotatably mount the wheel of the spark producing means.

8. In a cigar lighter, a casing, a rotatable finger engaging wheel mounted on the top of the casing, a shaft on the casing adjacent the periphery of the finger engaging wheel and extending above the casing top, a sparking wheel on the shaft located above the finger engaging wheel, and gearing between the shaft and the finger engaging wheel and located below the latter for driving the sparking wheel from the finger engaging wheel.

In testimony whereof I have signed my name to this specification.

ALPHA H. METCALF.