H. M. MINK.

AUTOMOBILE DOOR LOCK.

APPLICATION FILED APR. 11, 1910.

985,433.

Patented Feb. 28, 1911.

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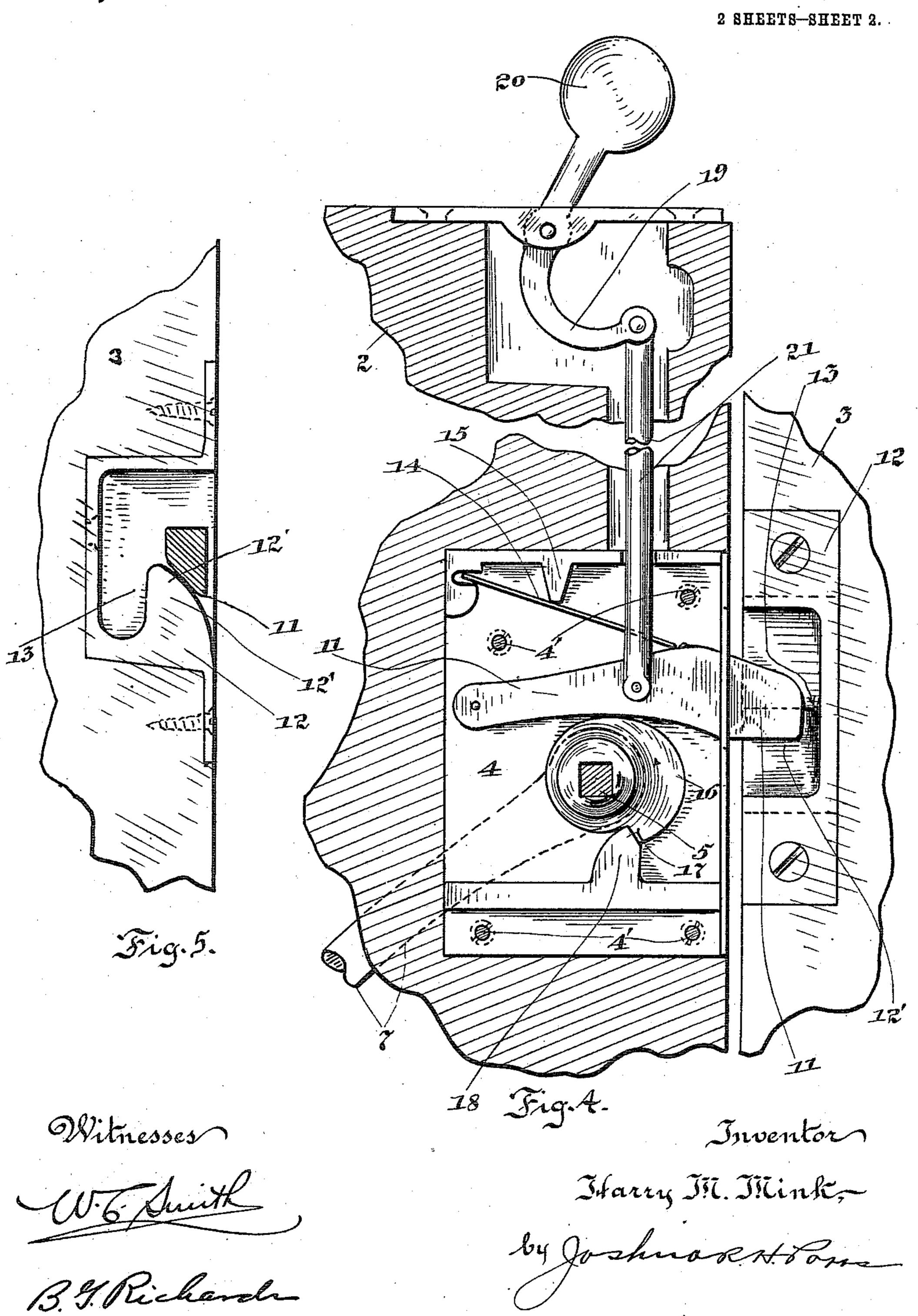
his Attorney

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HE NORRIS PETERS CO., WASHINGTON, D. C

UNITED STATES PATENT OFFICE.

HARRY M. MINK, OF KENOSHA, WISCONSIN.

AUTOMOBILE DOOR-LOCK.

985,433.

Specification of Letters Patent. Patented Feb. 28, 1911.

Application filed April 11, 1910. Serial No. 554,703.

To all whom it may concern:

Be it known that I, HARRY M. MINK, a citizen of the United States, residing at | cured to the door casing 3 and formed there-Kenosha, county of Kenosha, and State of 5 Wisconsin, have invented certain new and useful Improvements in Automobile Door-Locks, of which the following is a specification.

My invention relates to improvements in 10 automobile door locks and has for its object the production of a device of this characterwhich shall be inexpensive of manufacture and efficient in its operation.

A further object of my invention is to pro-15 vide an automobile door lock which may be readily foot-operated by a person sitting in the automobile.

Other objects will appear hereinafter.

With these objects in view my invention 20 consists in the novel construction and arrangement of parts which will be hereinafter fully described and more particularly pointed out in the appended claims.

My invention will be more readily under-25 stood by reference to the accompanying drawings forming a part of this specifica-

tion, and in which,

Figure 1 is a side elevation of an automobile embodying my invention in its preferred 30 form, Fig. 2 is a detail perspective showing a foot lever employed in the device, Fig. 3 is a detail perspective view showing a handle used to operate the lock, Fig. 4 is a fragmentary view showing a portion of the auto-35 mobile door in section and the operative parts of the door lock, and Fig. 5 is a detail side elevation.

Referring now to the drawings, 1 designates an automobile which may be of the 40 inclosed type as shown or of any other type

in which a door is provided.

2 designates a side door and 3 the door casing, a lock casing 4 being provided and secured in said door, as clearly shown in

45 Fig. 4.

An arbor 5 having a handle 6 integral therewith is fitted to the lock and extends inwardly therefrom to receive the foot lever 7, the latter being provided with a pedal 8 at 50 one end and a square opening 9 at the other to receive said arbor. The foot lever 7 is detachably secured to the arbor 5 by means of the set screw 10, the construction thereof being shown in detail in Fig. 2.

Pivoted in the lock casing 4 and projecting outwardly therefrom is a latch lever 11

the same being located near the center of said lock casing. A latch catch 12 is sein is a catch proper 12', the latch lever hav- 60 ing an inclined surface to engage said catch and to facilitate the raising thereof. The latch lever 11 is adapted to pass over the catch 12' and to drop into the recess 13 when the door is locked. The latch lever 12 is 65 held in its lowermost or normal position by means of a leaf spring 14 which is locked in the top part of the lock casing 4 and is adapted to rock over the projection 15 formed in said lock casing. In order to 70 raise the eatch lever 11 an oscillatory cam 16 is provided, the same having a square opening to receive the arbor 5 by means of which it is oscillated. A stop 17 is provided in the cam 16 which engages a projection 18 75 formed in the casing 4 for limiting the movement of said cam. Three different means are provided for operating the latch lever 11 and one of which comprises a bellcrank lever 19 which is fulcrumed in the top 80 of the door, as illustrated in Fig. 4, said lever having a handle 20 by means of which the same is operated. A connecting rod 21 connects the bell-crank lever 19 with the latch lever 11, so that when the handle 20 is 85 moved rearwardly by the operator said latch will raise out of the recess 13 when the door may be pushed open. The latch lever 11. may also be raised by turning the handle 6 in the usual manner, or the foot pedal 7 may 90 be used which is depressed by the operator as indicated by dotted lines in Fig. 1. It will be noted that any one of the means provided for operating the lock will operate efficiently and that any one of these means may 95 be used as best suits the convenience of the operator.

While I have shown what I deem to be the preferable form of my improved automobile lock, I do not wish to be limited thereto as 100 there might be various changes made in the details of construction and arrangement of parts described without departing from the spirit of my invention, and hence I desire to avail myself of such changes and alterations 105 as fairly fall within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters

Patent is:

1. In an automobile door lock, in combination with a door and door casing therefor, of

110

a latch catch secured to said casing, a latch casing secured to said door, a latch pivoted in said latch casing and projecting therefrom for coöperation with said latch catch, an oscillatory cam mounted in said casing for raising said latch, means for limiting the oscillation of said cam, an arbor secured in said cam, and a foot lever detachably secured to the inner end of said arbor and a handle secured to the outer end thereof, substantially as described.

2. In an automobile door lock, in combination with a door and door casing therefor, a latch catch on said door casing, a latch casing secured to said door, a latch pivoted in said latch casing and projecting therefrom

for engaging said catch, a spring over said latch adapted to depress the same, a cam under said latch for raising the same, a detachable foot lever arranged on the inside of the 20 door and connected with said cam and a hand lever projecting from the top of the door connected with and adapted to raise said latch, substantially as described.

In testimony whereof I have signed my 25 name to this specification in the presence of

two subscribing witnesses.

HARRY M. MINK.

Witnesses:
Charles Redmond,
Reinhold G. Peekman.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."