Oct. 20, 1925. 1,558,110

J. MENCHEN

AUTOMOBILE LOCK

Original Filed Oct. 6, 1919 6 Sheets-Sheet 1

Fig.1.

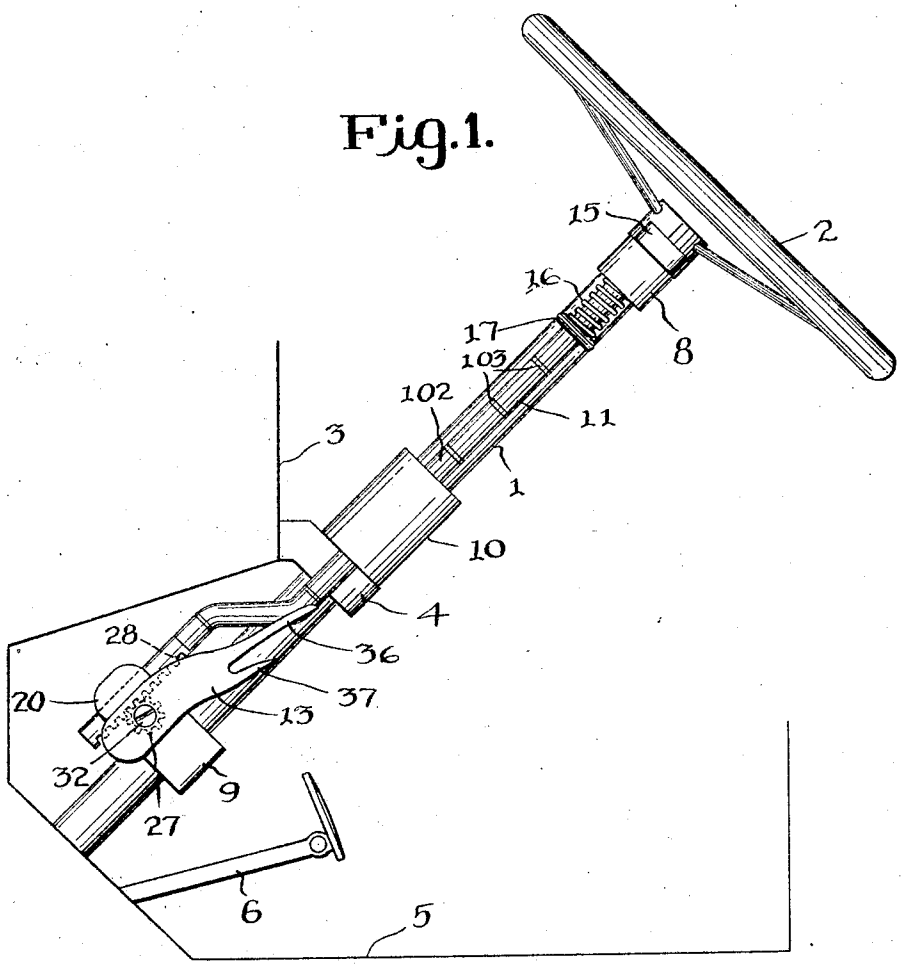
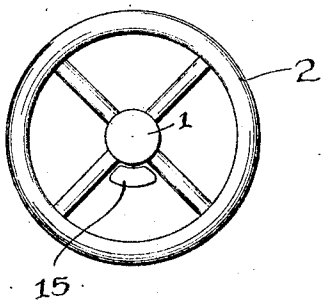


Fig.2.



INVENTOR

Joseph Menchen

BY

J. Brandenburg

ATTORNEY

Oct. 20, 1925. 1,558,110

J. MENCHEN

AUTOMOBILE LOCK

Original Filed Oct. 6, 1919 6 Sheets-Sheet 2

Fig.4.

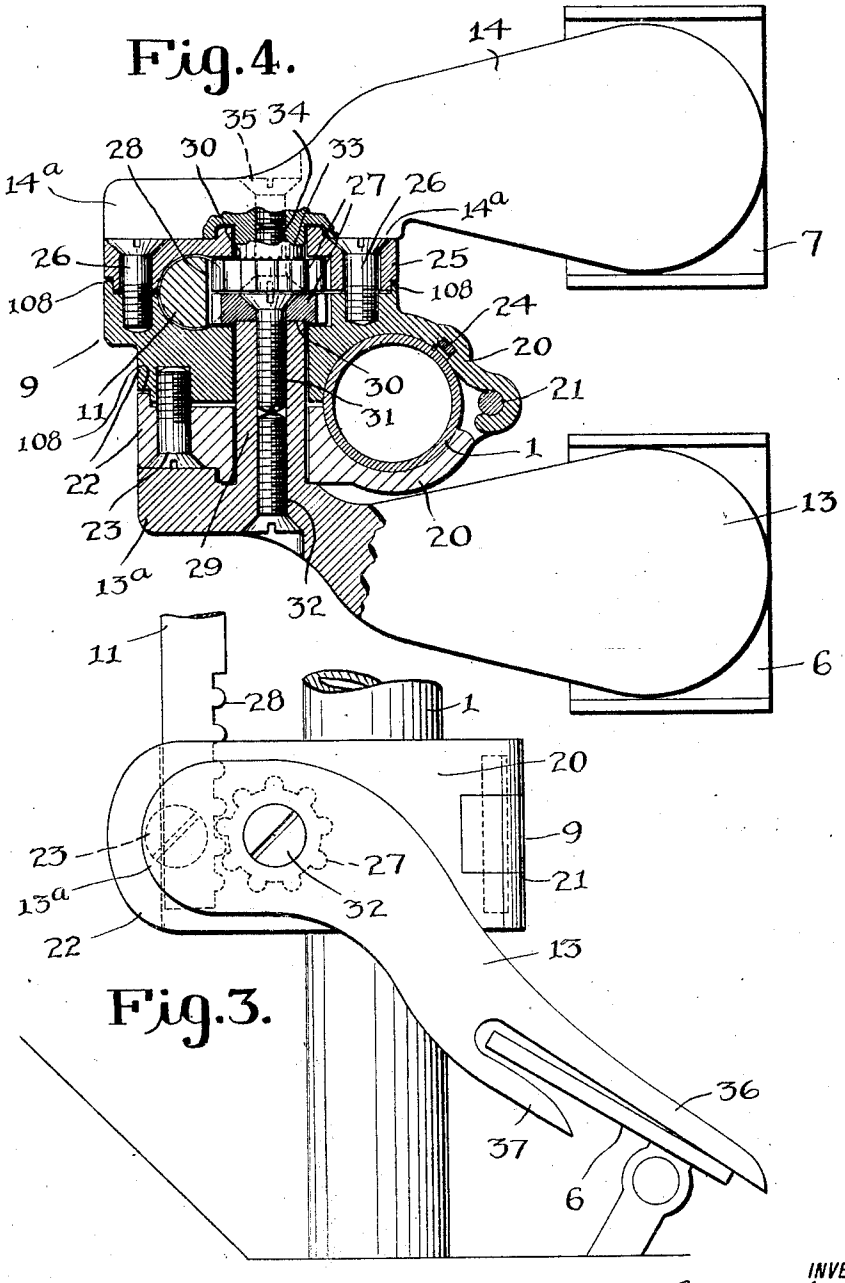


Fig.3.

INVENTOR

Joseph Menchen

BY

J. Brandenburg

ATTORNEY

Oct. 20, 1925. 1,558,110

J. MENCHEN

AUTOMOBILE LOCK

Original Filed Oct. 6, 1919 6 Sheets-Sheet 3

Fig. 5.

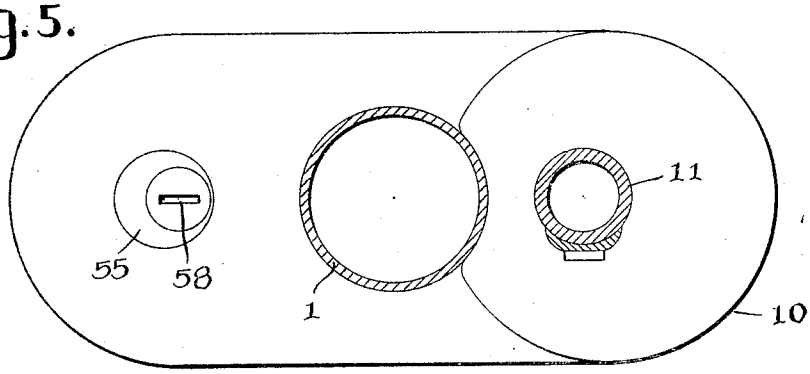


Fig. 6.

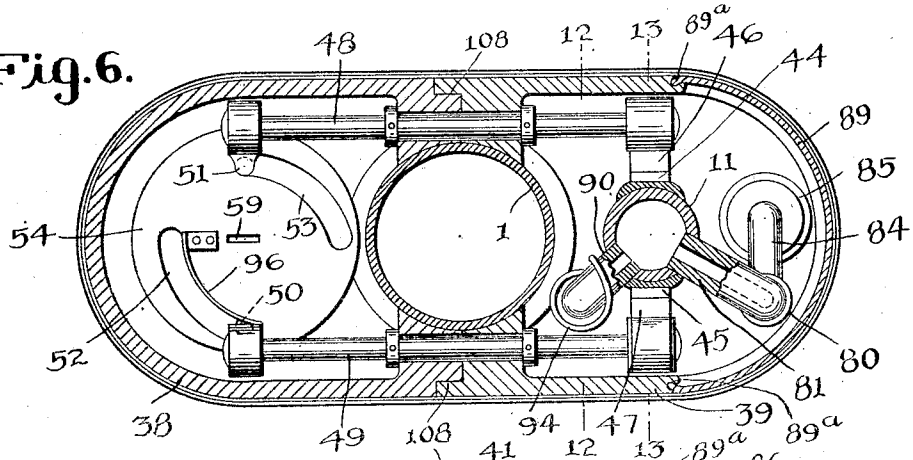
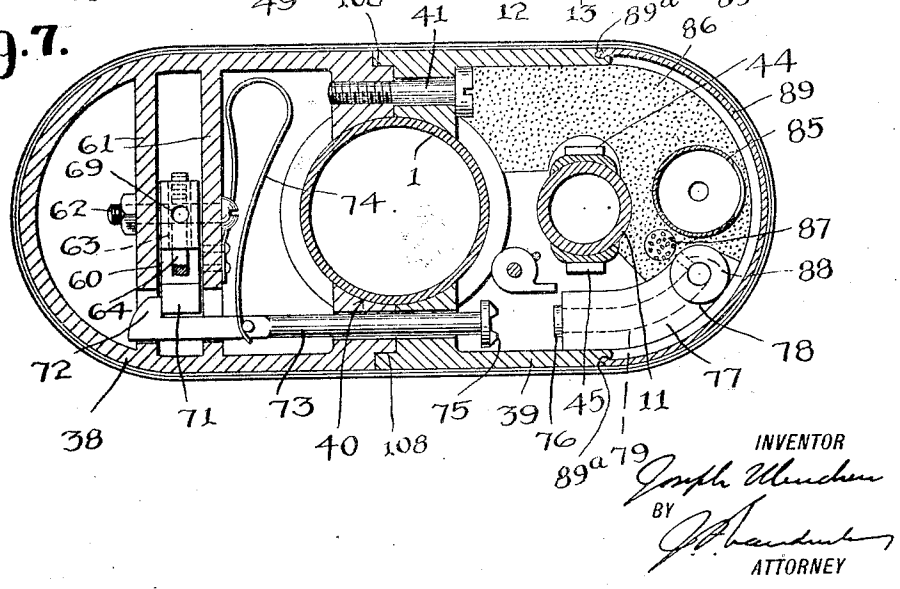


Fig. 7.



INVENTOR

Joseph Menchen

BY

J. Chandler

ATTORNEY

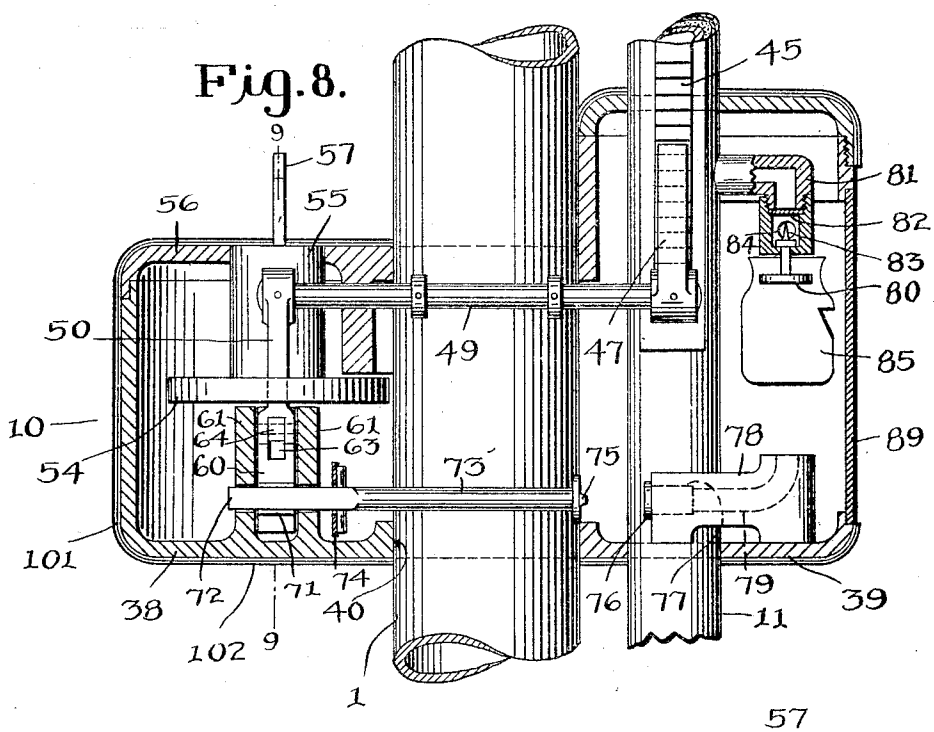
Oct. 20, 1925. 1,558,110

J. MENCHEN

AUTOMOBILE LOCK

Original Filed Oct. 6, 1919 6 Sheets-Sheet 4

Fig.8.



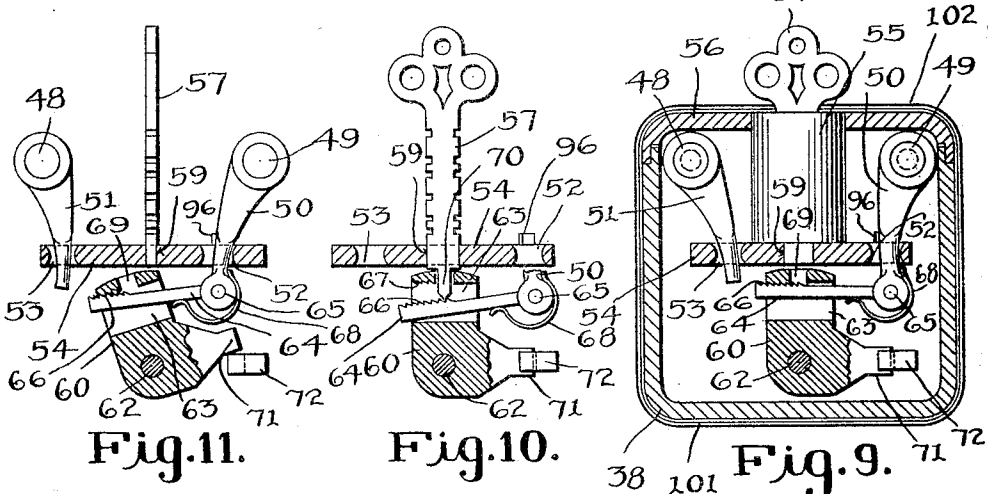


Fig.11.

Fig.10.

Fig.9.

INVENTOR

Joseph Menchen

BY

J. F. Lindenberg

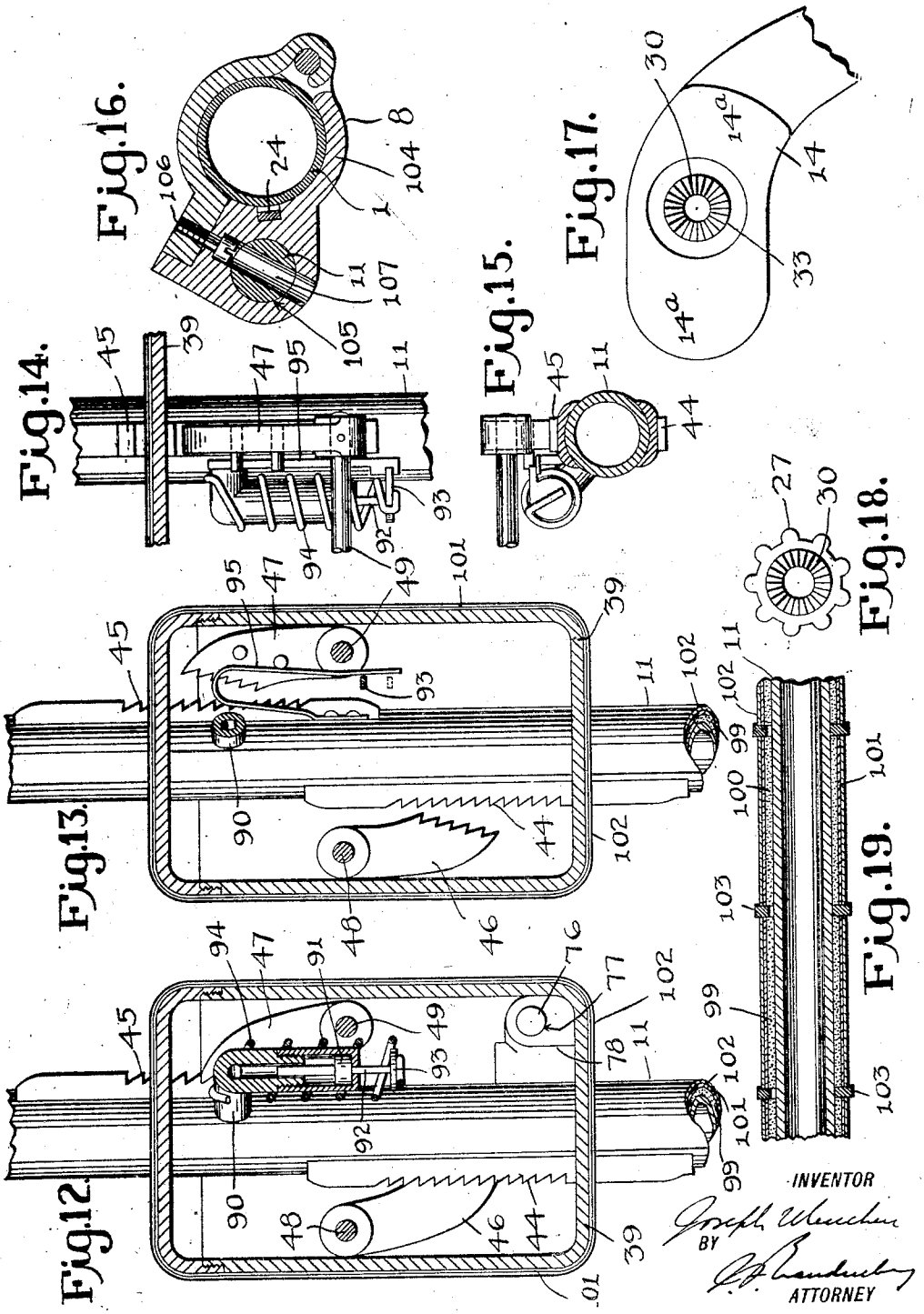
ATTORNEY

Oct. 20, 1925. 1,558,110

J. MENCHEN

AUTOMOBILE LOCK

Original Filed Oct. 6, 1919 6 Sheets-Sheet 5



Oct. 20, 1925. 1,558,110

J. MENCHEN

AUTOMOBILE LOCK

Original Filed Oct. 6, 1919 6 Sheets-Sheet 6

Fig.22.

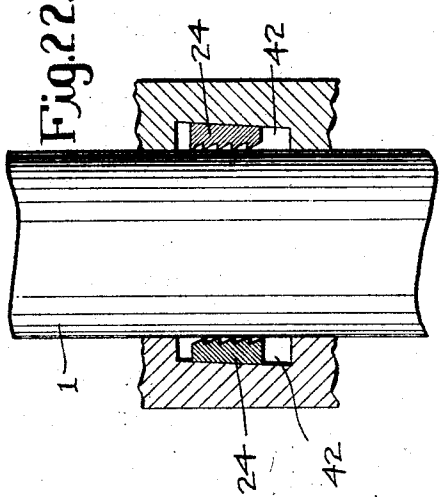


Fig.24.

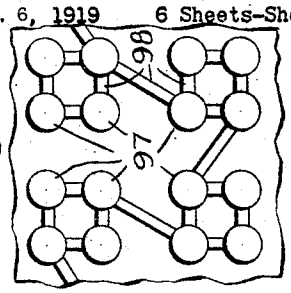


Fig.23.

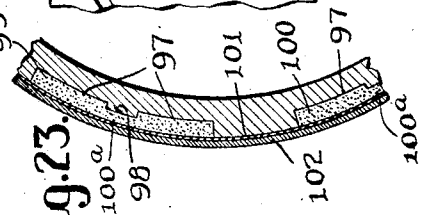


Fig.20.

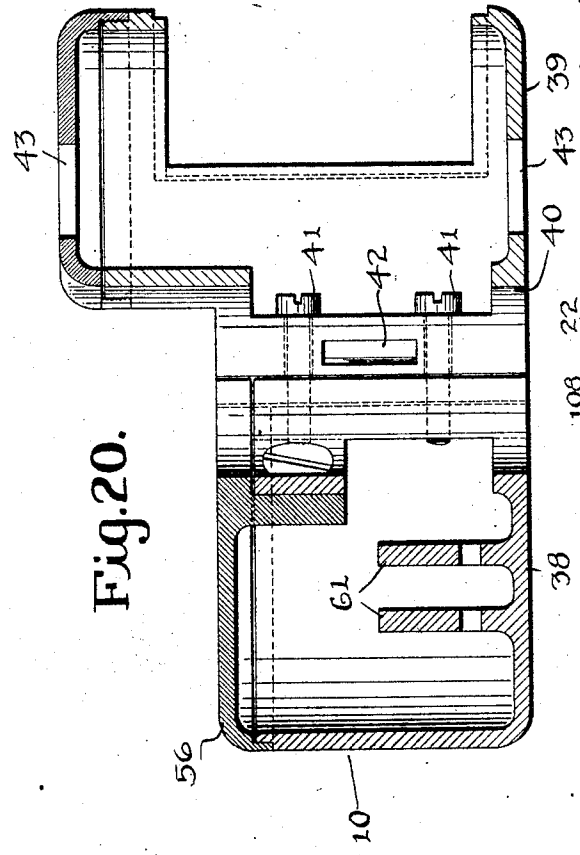
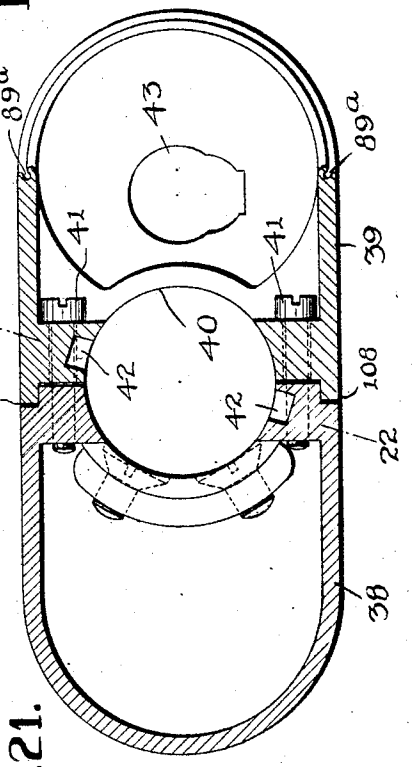


Fig.21.



INVENTOR

Joseph Menchen

BY

J. P. Lundenberg

ATTORNEY

Patented Oct. 20, 1925. 1,558,110

UNITED STATES PATENT OFFICE.

JOSEPH MENCHEN, OF SUMMIT, NEW JERSEY, ASSIGNOR TO MADGE MENCHEN, OF NEW YORK, N. Y.

AUTOMOBILE LOCK.

Application filed October 6, 1919, Serial No. 328,736. Renewed March 19, 1925.

To all whom it may concern:

Be it known that I, JOSEPH MENCHEN, a citizen of the United States, and resident of Summit, in the county of Union and State of New Jersey, have invented a new and useful Automobile Lock, of which the following is a specification.

The invention is a lock or theft-preventive means for automobiles, and the object is to provide a device of simple, convenient and effective character. A particular object is to enable the clutch and brake pedals and the steering-wheel to be locked or rendered inoperative by one operation. A specific object is to provide an effective pedal lock, which does not interfere with the normal use of the pedal. Another object is to cause the device to be self-protecting in respect to the fastenings whereby it is secured in place, and otherwise safeguarded against tampering. In its preferred embodiment the device comprises a plurality of clamps or attachments applicable to a steering-column, a rod or longitudinal member slidable in said clamps alongside the column, two laterally spaced, hinged, pedal-depressing arms on one clamp operatively connected with the lower part of the rod, spring means urging the parts so as to hold the steering-wheel lock withdrawn and the pedal-depressing arms swung back out of the way, and a key or other lock on another of the clamps cooperating with the rod.

Further features relate to means for raising an alarm in event of tampering. Still another object is to provide the device with offensive means for compelling the retreat of a would-be thief. A particular object is to cause the operation of one, and preferably of a plurality of alarms and offensive devices in event of an attempt to pick the lock. In the embodiment herein disclosed the said alarms include a cartridge or explosive alarm and a whistle or the like, and the force of the explosion is utilized to release compressed air from a reservoir to effect prolonged blowing of the whistle. Instead of air, other compressed medium may be employed, the term "air" being used as typical. In the preferred embodiment, one of the operative parts of the mechanism constitutes the pressure reservoir. Means are also provided whereby an attempt to render the device harmless by cutting into the reservoir causes the operation of alarm and offensive means through the action of a spring actuator which is normally held inoperative by the air pressure. Fume-producing means in the casing, set into action by the explosion of the cartridge alarm or otherwise, cause the intending thief to retire or be overcome.

The invention also includes a protective covering, lining or network of explosive and combustible character in the walls of the device, whereby cutting or drilling produces explosions or fumes, or both. Such protective covering preferably comprises a plurality of bodies or trains of compositions of different characters, explosive and fume-producing, adapted to give rise to a series of combustions extending over a substantial period of time.

The preferred and complete embodiment of the invention will now be described, but it will be understood that the various instrumentalities are subject to substantial modification and that parts may be omitted and the combinations altered without departing from essentials.

In the accompanying drawings forming a part hereof:

Fig. 1 is a side elevation of the invention applied to an antomobile;

Fig. 2 is a plan view normal to the top of the wheel;

Fig. 3 is an enlarged side elevation of the lower part of the device;

Fig. 4 is a horizontal section through Fig. 3;

Fig. 5 is a top plan of a chambered attachment to the steering-column forming a part of the device;

Fig. 6 is a section through Fig. 5 perpendicular to the axis of the column;

Fig. 7 is a similar view taken in a lower plane;

Fig. 8 is a vertical section through the enclosure;

Fig. 9 is a section through Fig. 8 on the line 9—9;

Fig. 10 is a view indicating operation when an authorized key is used;

Fig. 11 illustrates operation with an improper key;

Fig. 12 is a section through the enclosure on the line 12—12 of Fig. 6;

Fig. 13 is a section on the line 13—13 of

Fig. 6, showing a different condition of operation;

Fig. 14 is an elevation of a portion shown in Fig. 12 looking at right angles to that view;

Fig. 15 is a horizontal section through Fig. 14;

Fig. 16 is a cross-section through the top clamp or attachment;

Fig. 17 is an elevation looking at the inner side of a portion of one of the pedal-depressing arms;

Fig. 18 is an elevation looking at the inner side of one of the rack pinions;

Fig. 19 is a fragmentary longitudinal section through the rod, showing its protective covering;

Fig. 20 is a vertical section through the enclosure shown in Figs. 5 to 13, with the operative parts and the protective enclosure omitted;

Fig. 21 is a horizontal section through Fig. 20;

Fig. 22 is a section on the line 22—22 of Fig. 21;

Fig. 23 is an enlarged section through the compound wall of the enclosure; and

Fig. 24 is an enlarged fragmentary face view of the body of the wall.

The drawings represent schematically portions of an automobile, including the steering-column 1, the steering-wheel 2, the dash 3, a bracket 4 on the dash through which the column passes, the forward floor-boards 5, and the clutch and brake pedals 6, 7 in their accustomed locations at opposite sides in front of the base of the column (using "front" and "rear" in the sense of toward and away from the driver's position).

8 is an upper clamp or attachment secured to the column close beneath the wheel, 9 is a lower clamp over the base of the column; and 10 is an intermediate clamp or attachment. 11 is a rod sliding in openings in the clamps. 13, 14 are pedal-depressing arms pivoted on the lower clamps 9, normally standing out of the way behind the pedals and adapted to be depressed thereon. 15 is an embodiment of wheel-locking or blocking means on the upper end of the rod. A spring 16 encircling the rod and confined between the clamp 8 and a hand grip 17 on the rod tends to urge the sleeve and rod downward. Suitable locking means, hereinafter more particularly described, on the attachment 10, serves to lock the rod in raised position, against the action of the spring.

The preferred construction of the parts will now be described.

The lower clamp 9 comprises two collar halves 20 hinged at 21. The hinge is in front, and at the back the halves of the clamps have rearward extensions 22, which are united by a transverse screw 23 for drawing the collar halves tight against the column. A wedge 24 in a recess in the interior of the clamp and cooperating with the side of the column prevents all possibility of the clamp being forced upward. In the particular construction illustrated this attachment also includes a side piece 25 secured to one of the halves of the collar by screws 26, and between these parts a chamber is formed for the reception of a pair of pinions 27 and a channel for the passage of the lower part of the rod 11, this portion of the rod being formed with rack teeth 28 to mesh with the pinions. The pedal-locking arm 13 has a tubular bearing 29, which extends laterally inward through openings in the parts 20 of the clamp and at its inner end possesses a serrated formation 30 to fit with a similar formation on the side of the adjacent pinion 27. A screw 31 passes through the said pinion into the bearing 29, which is internally threaded. This construction permits the pedal-locking arm to be adjusted angularly with reference to the rack and the other arm in the assembling of the device and prevents the joint from being disassembled from the outside. A locking screw 32 extends through the pedal-locking arm from its outer side to bear against the end of the screw 30, but removal of this screw does not permit removal of the arm. The pedal-depressing arm 14 is provided with a cylindrical bearing 33 projecting inward through the member 25 and having a similar serrated joint 30 with the side of its pinion 27. Said arm and pinion are secured together at the desired angular adjustment by a screw 34 having its head on the inside and locked against loosening by an external screw 35.

The pedal-depressing arms 13 and 14 are slotted inwardly from their free ends, as seen in Fig. 1, so as to provide rigid upper and lower jaws 36 and 37, which lock with the pedal as the latter is depressed. The under jaw 37 is shorter than the upper jaw, so as to pass below the edge of the pedal when the upper jaw 36 is brought down upon its top.

The attachment 10 is applied to the steering-column immediately above the bracket 4 at the dash. As preferably constructed, the said attachment comprises two lateral halves 38 and 39 having complementary semi-circular recesses 40 to fit the column. The two sections are hollow and constitute closed boxes containing parts which will be described. The sections are secured together and held immovably upon the column by means of screws 41 extending through their inner meeting walls, the heads of these screws being contained in the chamber of the section 39 and being inaccessible after the structure is assembled. Wedges

24, similar to the one already described, located in recesses 42 in the face of the column opening in the casing and disposed as shown in Fig. 21 prevent the attachment being forced either up or down on the car. The box section 39 has alined openings 43 in the top and bottom for the guided passage of the rod 11, and this portion of the rod bears two series of reversely disposed ratchet teeth 44, 45 upon opposite sides. Cooperating with these teeth are two holding dogs 46 and 47 having corresponding teeth, the dogs being carried by horizontal pivot shafts 48 and 49 and extending in downward and upward directions, respectively.

The shafts 48 and 49 are journaled in openings in the meeting walls of the box sections and inside the section 38 carry downward projecting fingers 50 and 51 which project through eccentric cam slots 52 and 53 in a rotary oscillatory cam disk 54. Said cam disk is mounted upon the lower or inner end of a tumbler barrel 55 carried by the cover 56 of the section 38. Said tumbler barrel is of known construction and adapted to receive a key 57 inserted through an opening 58 in the outer end of the barrel. A slotted or angular opening 59 is formed in the center of the cam disk to receive the end of the key and to be turned thereby.

Behind the cam 54 is a trigger or displaceable member 60 which is mounted between lugs 61 on the bottom of the box upon a tranverse pivot 62. Said trigger is formed with a transverse opening 63 to receive a displacing arm 64, which is arranged to be operated by the turning of the cam disk 54, and in this instance is pivoted at 65 to the lower end of the finger 50. The upper side of the displacer arm is formed with teeth 66 to cooperate with teeth 67 on the trigger, the arm being pressed upward to engage the teeth by a spring 68. The top of the trigger also has a vertical opening 69, which is to permit the passage of a projection 70 which is provided on the end of the authorized key. This projection, when the key is inserted, pushes the displacing arm downward, so that it may move freely, and holds the trigger against being displaced from its normal position.

A lug 71 on the trigger normally restrains a lug 72 on the rear end of a firing-pin 73, disposed horizontally in the box and extending into the section 39. When the firing-pin is released it is actuated by a spring 74, so that its firing end 75 is driven against the percussion end of an explosive cartridge 76, which is seated in a socket 77 in the box section 39. The block 78 containing the cartridge socket is formed with a conduit 79, the outlet of which is directed upward in line with a piston 80 carried by a branch 81 on the rod 11 within the box.

Said rod 11 is made hollow substantially throughout its length to form a reservoir in which a body of compressed air or other gas is sealed. The branch 81 constitutes an outlet from this reservoir, which is normally sealed, however, by a diaphragm 82 located above an elbow in the outlet branch. The stem of the piston 80 passes through the bottom of this elbow and bears a puncturing point 83, which when the piston is thrust upward by the force of the discharge pierces the diaphragm and permits the air to escape gradually therethrough. The air thus allowed to escape passes through a lateral portion 84 of the outlet to a whistle 85, which will continue to sound for a substantial period.

Fume-producing means are also provided in the casing. In the particular case illustrated, said means comprises a block of sulphur 86 having a pellet of quick-match composition 87 located in proximity to a vent 88 in the flame conduit. The section 39 of the casing has a portion 89 of its wall which is formed or secured in a normally permanent manner but which will be broken or driven out by the expansion within the chamber produced by the explosion, thereby liberating the fumes of the burning sulphur. Preferably, the said portion is a curved panel of sheet metal having its edges sprung into grooves 89[a] in the sides of an opening in the curved end of the section, the panel being flush with the wall of the body.

It will thus be understood that if the cam disk 54 is turned in an attempt to pick the lock, or, as may be more generally stated, through the use of an improper key which does not hold the trigger or displaceable member 60 against displacement, the trigger will become tilted and the alarm and offensive devices described will be operated. When the proper key is inserted, this will not occur.

Means are also provided whereby an attempt to cut the rod 11 or to puncture it so as to let out the compressed fluid, will also cause the alarm and offensive devices, or a part thereof, to be brought into action. In the particular construction illustrated the hollow rod 11 is fitted with a second branch 90 within the casing, this branch having a vertically down-turned portion which contains a piston 91, which is normally held down by the pressure of the air. This piston has a stem 92 passing through the bottom of the branch and bearing a head 93. The piston, it will be understood, is normally held tight seated by the pressure of the air, so that the fluid cannot escape. A spring 94, normally under tension, is arranged so as to tend to urge the piston and head 93 upward against the action of the air. The spring is relatively weak, however, so that it is held inoperative unless the pres-

sure in the reservoir falls as the result of boring or sawing the rod. Then the head 93 rises and releases a spring 95, which acts upon the pawl 47 to throw the same to the open position. This movement, transmitted through the shaft 49 and finger 51, turns the cam disk 54, and since the trigger 60 is not held against displacement, the firing-pin 73 is released to explode the cartridge and cause the ignition of the fume-producing means in the casing.

A spring 96 secured to the disk 54 and bearing against the finger 50 is provided as a non-positive holding means to prevent vibration and accidental displacement of the disk.

The entire outside of the casing 10 is provided with an explosive or combustible protective covering adapted to be ignited as the result of an attempt to cut or break the wall. Such covering or lining or interlining of the wall may be constituted in various ways. In the preferred construction the body wall is formed exteriorly with pockets 97 and channels 98 connected roughly in series or branching series. The pockets 97 are filled with deposits 99, 100 of two or more different kinds and the channels 98 are also filled with suitable composition 100^a. The deposits 99 may be understood to be of explosive character, and those designated 100 of noxious fume-producing character. Such compositions are known. The composition or fuses 100^a in the connecting channels are of slow-burning character, to delay the action. One or more, or all, of the different kinds of compositions are adapted to be set off by abrasion or friction, preferably by having powdered glass incorporated therein, so that an attempt to injure the wall will start the combustion of the train, resulting in a series of quick and slow combustions extending over a period and producing reports and discharges of fumes. The pockets and channels are preferably covered by one or more wadding and protecting layers 101 of linen and shellac or other materials, the shellac or its equivalent being used for waterproofing; and the whole is encased by a sheet metal sheath 102. The rod 11 is protected with a similar covering. This covering may be constituted by layers of explosive and combustible composition 99, 100 of explosive and fume-producing character disposed in alternation or otherwise lengthwise of the rod and covered by layers 101 and 102 as in the case of the box 10, the sections being separated by washers or spacers 103 having openings through which the combustion may be propagated from one section to another.

The steering-wheel lock 15 at the upper end of the rod 11 may be of various forms. In the present instance it is shown as a block of such proportions as to pass between a pair of spokes of the wheel either fitting fairly closely or leaving insufficient play for steering. Preferably, the arrangement is such that the lock will cooperate with the wheel in a position of the latter corresponding to a turned position of the front wheels of the vehicle.

The top clamp 8 is provided for the purpose of rendering the rod more solid. It is preferably applied to the steering-column immediately below the wheel, and as shown comprises a clamp collar 104 to grip the column, with an eye 105 upon one side of it for the passage of the rod. The clamp collar is secured by a clamp screw 106, the head of which is on the inside and accessible only through a hole in the opposite side of the eye 105 and a hole 107 in the rod which at this region is otherwise solid, said hole in the rod being out of register with the hole in the eye in the locked condition. At such time, therefore, the solid rod completely protects and conceals the head of the screw.

The arms 13, 14 have portions 13^a, 14^a, which in the locked condition closely embrace the regions of the clamp 9 containing the fastening screws 23 and 26, so that the heads of these screws are covered, making it impossible to remove them. When the arms are swung upward, however, in the normal or unlocked condition, the screws are exposed, permitting the clamp to be applied or removed. Where the parts 20 meet adjacent the screw 23 the joint is formed with an offset 108, constituted by a jut on one of the members and a rabbet or recess in the other. Similar offsets 108 are provided in the joint between the part 25 and the adjacent part 20, outside of the screws 26. The same construction is also employed at the joint between the sections 38 and 39 of the box clamp 10, outside of the fastening screws 41. In this way the location of the screws is concealed and it is difficult or impossible to reach them with a cutting tool.

What I claim as new is:

1. In a theft-preventive device for automobiles, the combination of means for rendering the automobile inoperative, a key-operated lock therefor, a cartridge, a firing-pin under tension, and means whereby use of an improper key releases said firing-pin.

2. In a theft-preventive device for automobiles, the combination of means for rendering the automobile inoperative, a key-operated lock therefor, a reservoir of compressed air, an alarm operable by the air when released, and means whereby use of an improper key causes the release of air from the reservoir to sound said alarm.

3. In a theft-preventive device for automobiles, the combination of means for rendering the automobile inoperative, a key-operated lock therefor, a reservoir of com-

pressed air, a whistle operable by the air when released, and means whereby use of an improper key causes the release of the air through said whistle.

4. In a theft-preventive device for automobiles, the combination of means for rendering the automobile inoperative, a key-operated lock therefor, a reservoir of compressed air, a whistle, a seal interposed between the reservoir and the whistle, and means whereby the use of an improper key causes the breaking of said seal.

5. In a theft-preventive device for automobiles, the combination of means for rendering the automobile inoperative, a key-operated lock therefor, a reservoir of compressed air, a whistle, an outlet from the reservoir to the whistle containing a diaphragm, a puncturing device, and means whereby use of an improper key causes said device to puncture the diaphragm and sound the whistle.

6. In a theft-preventive device for automobiles, the combination of means for rendering the automobile inoperative, a key-operated lock therefor, a cartridge, means whereby use of an improper key causes the cartridge to explode, a reservoir of compressed air, a whistle operable thereby, a seal interposed between the reservoir and whistle, and means whereby the explosion breaks said seal.

7. In a theft-preventive device for automobiles, the combination of means for rendering the automobile inoperative, a key-operated lock therefor, a cartridge, means whereby use of an improper key causes the cartridge to explode, a reservoir of compressed air, a whistle operable thereby, a diaphragm between the whistle and reservoir, and a puncturing device for the diaphragm adapted to be actuated by the explosion.

8. In an automobile theft-preventive device, the combination of a member movable longitudinally of the steering-column for rendering the automobile inoperative, a holding dog cooperative with said member, a finger connected with the dog, a rotary cam member cooperative with said finger and having an opening for the passage of the end of a key, a trigger behind the cam member formed so as to be held against movement by an authorized key, a member operable by rotation of the cam member to displace said trigger, and alarm mechanism controlled by said trigger.

9. In an automobile theft-preventive device, the combination of a member movable longitudinally of the steering-column for rendering the automobile inoperative, a holding dog cooperative with said member, a finger connected with the dog, a rotary cam member cooperative with said finger and having an opening for the passage of the end of a key, a trigger behind the cam member formed so as to be held against movement by an authorized key, a member operable by rotation of the cam member to displace said trigger, and a firing-pin restrained by said trigger.

10. In an automobile theft-preventive device, the combination of a member movable longitudinally of the steering-column for rendering the automobile inoperative, a holding dog cooperative with said member, a finger connected with the dog, a rotary cam member cooperative with said finger and having an opening for the passage of the end of a key, a trigger behind the cam member formed so as to be held against movement by an authorized key, a displacer flexibly connected with said finger and cooperative with the trigger, and alarm mechanism controlled by said trigger.

11. In an automobile theft-preventive device, the combination of a member movable longitudinally of the steering-column for rendering the automobile inoperative, a holding dog cooperative with said member, a finger connected with the dog, a rotary cam member cooperative with said finger and having an opening for the passage of the end of a key, a trigger behind the cam member formed so as to be held against movement by an authorized key, a displacer flexibly connected with said finger to cooperate with the trigger, said displacer being arranged to be pushed out of the way by an authorized key, and alarm mechanism controlled by said trigger.

12. In an automobile theft-preventive device, the combination of a member movable longitudinally of the steering-column for rendering the automobile inoperative, a pair of holding dogs adapted to lock the member against movement in either direction, fingers connected with said dogs, a key-operated cam disk cooperating with said fingers and having an opening for the passage of the end of a key, a displaceable member behind the cam disk having a retaining opening to receive a projection on an authorized key, means whereby turning of the disk in absence of such key displaces said member, and alarm mechanism controlled by said member.

13. In an automobile theft-preventive device, the combination of means for rendering the automobile inoperative, a key-operated lock therefor, and means whereby the use of an improper key causes the liberation of noxious fumes.

14. In an automobile theft-preventive device, the combination of means for rendering the automobile inoperative, a key-operated lock therefor, a cartridge, means whereby the use of an improper key causes

the cartridge to explode, and means for producing noxious fumes adapted to be brought into action by the explosion.

15. In an automobile theft-preventive device, the combination of means for rendering the automobile inoperative, a key-operated lock therefor, a cartridge, means whereby the use of an improper key causes the cartridge to explode, a chamber containing fume-producing material, and a wall adapted to be forced out by the explosion to permit the escape of the fumes.

16. In an automobile theft-preventive device, the combination of a hollow operative member for rendering the automobile inoperative constituting a reservoir of compressed air, key-operated means for locking said member, means whereby the use of an improper key causes the escape of air from said member, and an alarm operable by the escaping air.

17. In an automobile theft-preventive device, the combination of a hollow operative member movable lengthwise of the steering-column for rendering the automobile inoperative and constituting a reservoir of compressed air, key-operated means for locking the member, an alarm adapted to be operated by air from the reservoir, and means whereby use of an improper key liberates the air.

18. In an automobile theft-preventive device, the combination of a hollow operative member movable lengthwise of the steering-column for rendering the automobile inoperative and constituting a reservoir of compressed air, key-operated means for locking the member, the reservoir of said member having an outlet sealed by a diaphragm, a warning signal connected with the outlet, a device for puncturing the diaphragm, means for receiving a cartridge in such relation that its explosion actuates the puncturing device, and means whereby use of an improper key causes the explosion of said cartridge.

19. In an automobile theft-preventive device, the combination of a hollow operative member for rendering the automobile inoperative constituting a reservoir of compressed air, key-operated means for locking said member, means whereby use of an improper key liberates air from the member, an alarm operable by the escaping air, and supplementary means normally held inoperative by the pressure in the member and adapted to act in event of the member being cut to cause a warning to be given.

20. In an automobile theft-preventive device, the combination of a hollow operative member for rendering the automobile inoperative constituting a reservoir of compressed air, means for locking said member, means whereby cutting of the member permits the air to escape, and an alarm operable by the escaping air.

21. In an automobile theft-preventive device, the combination of a hollow operative member for rendering the automobile inoperative constituting a reservoir of compressed air, means for locking said member, an alarm, and means normally held inoperative by the pressure in the member for controlling said alarm, whereby the alarm is actuated in event of the member being cut.

22. In an automobile theft-preventive device, the combination of means for rendering the automobile inoperative, a key lock therefor, a reservoir of compressed air, means whereby use of an improper key liberates air from the reservoir to actuate an alarm, and supplementary means normally held inoperative by the pressure in the reservoir and adapted to act in event of the reservoir being cut to cause a warning to be given.

23. In an automobile theft-preventive device, the combination of a hollow operative member for rendering the automobile inoperative constituting a reservoir of compressed air, a holding dog cooperative with said member, a finger connected with the dog, a key-operated cam member cooperating with said finger and having an opening for the passage of a key, a displaceable member behind the cam member adapted to be held against movement by the end of an authorized key, a warning signal controlled by said displaceable member, means whereby movement of the cam member in absence of an authorized key displaces the displaceable member, means whereby operation of said warning signal opens an outlet from the reservoir member to operate a second signal, a spring device normally held against operation by the pressure in the reservoir member, and means whereby said spring device actuates the cam member in event of the reservoir member being cut.

24. In an automobile theft-preventive device, the combination of a hollow operative member for rendering the automobile inoperative constituting a reservoir of compressed air, a holding dog cooperative with said member, a finger connected with the dog, a key-operated cam member cooperating with said finger and having an opening for the passage of a key, a displaceable member behind the cam member adapted to be held against movement by the end of an authorized key, a warning signal controlled by said displaceable member, a displacer connected with said finger to cooperate with the displaceable member, means whereby operation of said warning signal opens an outlet from the reservoir member to operate a second alarm, a spring device normally

held against action by the pressure in the reservoir member, and means whereby said spring device when released by falling pressure operates the dog and thereby the displacer to cause the operation of the first alarm in event of the reservoir member being cut.

25. In an automobile theft-preventive device, a casing adapted to be secured to the steering-column, a longitudinal rod movable through said casing and controlling means for rendering the car inoperative, key-operated mechanism in the casing for locking said rod, alarm mechanism in the casing, and means whereby the use of an improper key causes the operation of the alarm mechanism.

JOSEPH MENCHEN.