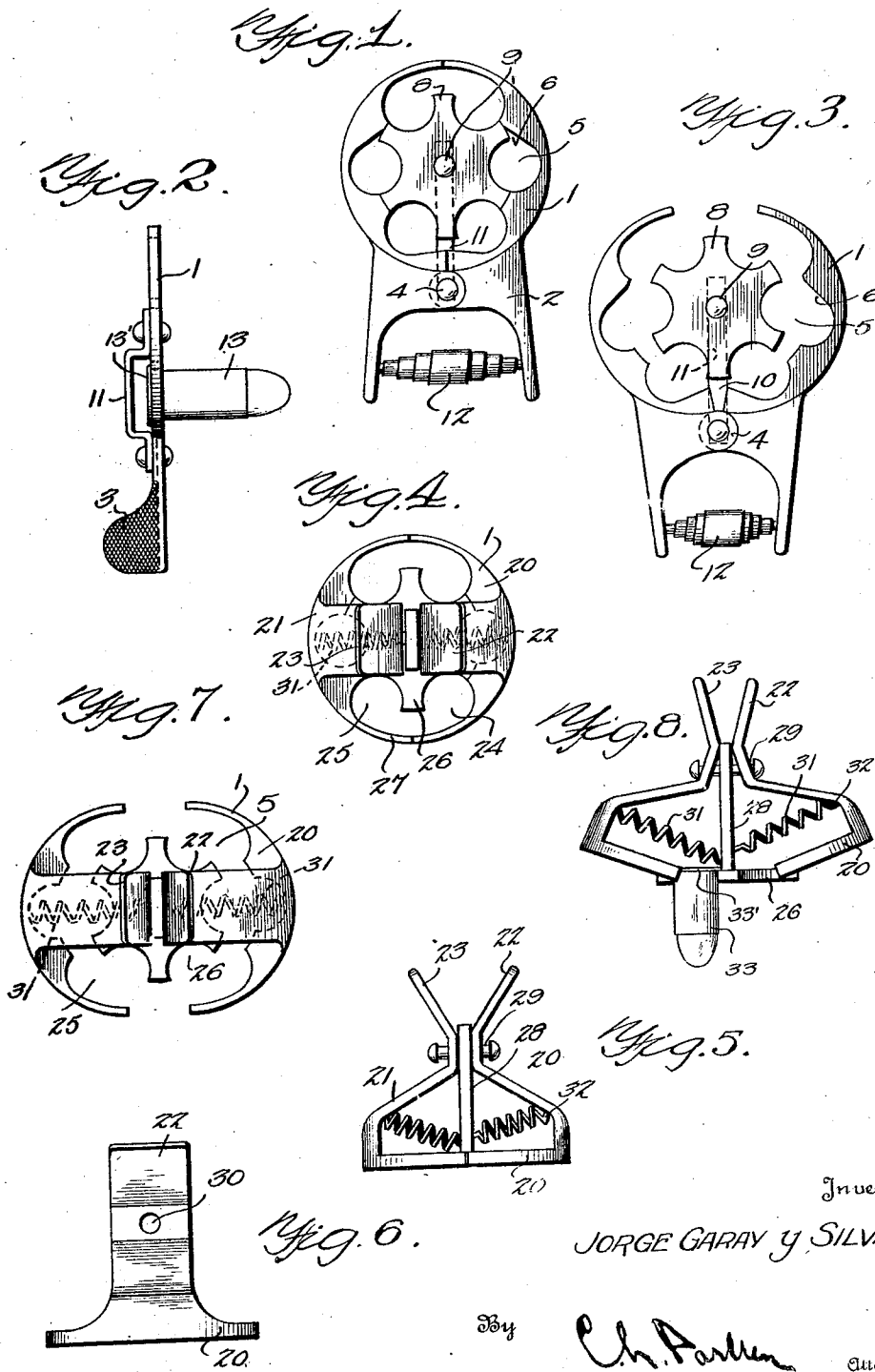


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J. GARAY Y SILVA
LOADING DEVICE FOR FIREARMS
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LOADING DEVICE FOR FIREARMS.

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To all whom it may concern:

Be it known that I, JORGE GARAY Y SILVA, a citizen of the Republic of Mexico, residing at Mexico city, Federal District, Mexico, have invented certain new and useful Improvements in Loading Devices for Firearms, of which the following is a specification.

This invention relates to improvements in fire arms, and more particularly to improvements in loading or charging apparatus therefor.

More specifically, the invention relates to charging apparatus for that type of fire arms provided with a revolving cylinder in which a plurality of cartridge chambers are formed, such cylinder being separable to a certain extent from the revolver frame, so that its back face is fully exposed to permit the placing of fresh cartridges and the ejection of the used ones. The weapons considered as standard of the above named class, are the pistols or revolvers in which the cylinder is displaced to one side, known as "side ejection", or more commonly as "left handed", and those in which the barrel, or the part of the frame holding said barrel, is connected to the remaining part of the frame by means of a shaft or pin, so that, when so desired, a downward swinging movement can be imparted to said barrel towards the so called front part of the gun, the back face of the cylinder being thus fully exposed. The last type is known as "Smith Wesson's system" or "star system".

So far as I know, prior to this invention, it was necessary, in order to place a fresh round of cartridges in fire arms of the above mentioned classes, to insert the cartridges one after another in the several chambers formed in the cylinder, considerable time being spent in this process as compared with the time employed in replacing the cartridge supply in automatic arms. The time thus spent, as it is easy to understand, is most valuable to the man who finds it necessary to protect himself from an attack using a fire arm of the type mentioned before. The fire arms on account of their simple mechanical construction which render them less liable to derangement, are preferred by many shooters.

It is hereby expressly stated that this invention is not limited for use in connection with fire arms of the class known as re-

volvers or pistols, but to all types of fire arms provided with a cylinder, the construction of which, as well as of the weapon in general, will permit the exposure of the full back surface of such cylinder when it is necessary to charge or empty the same.

The primary object of my invention is to simplify placing of a full charge of cartridges in weapons having a cylinder of the type described.

Other advantages of the invention will be apparent from the following specification and will be more clearly pointed out in the claims.

In the accompanying drawings, forming a part of this specification:

Figure 1 is a plan view of the device showing it in closed position,

Figure 2 is a side elevation,

Figure 3 is a plan view of the device, showing it in open position,

Figure 4 is a top plan view of a modified form of my invention, which is represented in its closed position,

Figure 5 is a vertical sectional view of a modified form, shown also in its closed position,

Figure 6 is a side view of the device illustrated in Figures 4 and 5,

Figure 7 is a top plan of the modified form of the invention, in its open position, and,

Figure 8 is an end elevation of the modified form of my invention in its open position.

In the drawings, as well as in this specification, I have taken as an example a charging device for six cartridges but my invention is not merely limited to this particular amount, and inasmuch as the principle involved in said invention is applicable with slight modifications (in the shape, not in the essence) for use with any desired number of cartridges, it would be entirely useless to illustrate and describe every one of these modifications.

With reference to the form of the invention shown in Figures 1, 2, and 3 of the drawings, 1 shows one of the two semi-circular parts forming the front part of the device. Such semi-circular part is integrally formed with the holding piece or handle marked 2. Number 3 represents a corrugation in the handle to prevent the device from sliding from the fingers. Number 4 shows the pin or pivot connecting the two halves

forming the external part of the device, 5 is one of the lateral lodgements for the cartridges, and number 6 shows the shape of the lateral cut that is necessary to give to these lodgements or holes to permit the free leaving of the cartridge from its place upon opening the device, such not being the case if the hole be formed entirely round.

Numeral 8 denotes a center star shaped piece provided with semi-circular grooves forming the complement of the partially formed holes in the lateral parts marked 1, such holes being provided for the insertion of the cartridges, and numeral 10 is a bridge intended to hold the center or star shaped piece 8 of the device to the lateral parts marked 1—2, 1—2. Numeral 9 shows a rivet or pin that joins center piece 8 to the bridge marked 10.

Bridge 10 is rigidly fixed either to the pin marked 4 or the protruding parts formed in the lateral pieces, in which protruding parts the hole for pin 4 is placed, so that, when the device is in open position, the center piece 8 shall remain at the same distance from both side pieces 1. It is necessary to give the bridge an elevated shaped center, as shown by means of numeral 11, with regard to the plane of the side and center pieces, so as not to interfere with the free entrance of the rims 13' of the cartridges 13 into the lower openings of the holder.

Numeral 12 denotes a spring by means of which the device is constantly kept in closed position, it being understood that the invention is not confined to the use of such kind of spring illustrated in the drawing, as another kind of spring adapted to perform the corresponding duties can be used in place of the one shown in said drawing.

The charger shown in Figures 1 to 3 performs its duty as follows:

In order to place the cartridges in same it is simply necessary to take with the thumb and the remaining fingers, the handles 2 and to exert a slight inward pressure on the same, so that when the side pieces move upon the center pivot against the pressure exerted by spring 12, the semi-circular pieces marked 1 will open slightly, just enough to permit the insertion of the cartridges through the cartridge holes. These cartridges can be inserted through either the upper or the lower face of the device, the user being careful that the rim end of the cartridges will protrude slightly from the upper face of the device, as shown in Figure 2 of the drawing. The pressure upon the handles 2 is relieved when the cartridges are in their respective places, and the subsequent expanding of spring 12 causes the semi-circular pieces 1 to close, thus firmly holding the cartridges in their places. The cartridge charger or holder is then ready for use when necessary.

In order to load a weapon, the cylinder is separated from the frame in the usual manner and the charging device is then arranged with the ends of the bullets projecting into the bores formed in the cylinder. After this, a slight inward pressure is made upon the handles 2, thus overcoming the tension of spring 12, and the consequent rotation of the sides of the device will cause the opening of semi-circular parts 12, said device assuming the position shown in Figure 2 of the drawings, and consequently the cartridges are then released from the holes. The device is then taken away and the cartridges will easily fall by gravity into the cylinder. To render this operation easier it is preferable that the cartridges be completely clean, greaseless and rustless.

A modified form of my invention is shown in Figures 4 to 8, such embodiment consisting of two semi-circular halves marked 20 and 21 which have on their upper faces, handles 22 and 23. Numerals 24 and 25 represent openings serving as lodgements for the cartridges. These openings are partly formed in the external semi-circular pieces 20 and 21 and partly in the star shaped or center piece 26. Numeral 27 designates the lateral cut required in the openings so that their side walls will not interfere with the cartridges leaving their places.

In order to connect the star shaped or center piece 26 with the remaining parts of the device, I provide a vertical support 28, the lower end of which is to the center piece in any suitable manner. The support 28 is provided with an opening 30 and a pin or shaft 29 is passed through this opening. The pin is more or less snugly fitted through the openings 30 (see Figure 6) in the inwardly directed parts of the handles, and such pin is provided with a head or protuberance on each end, to prevent displacement.

To normally retain the device in closed position, I employ springs 31 connected to the arms 20 and 21, as at 32, and the support 28. In Figure 8, I have shown a cartridge 33 in position, the said cartridge having a back ring 33'.

The operation of this modified form of the invention is similar to the form previously described, as by means of a small pressure applied upon handles 22 and 23, the cartridge openings will open just enough to permit the insertion of the cartridges, thus leaving the device ready for use. To load the pistol, it will be held with the barrel pointing downwardly and the back face of the cylinder will be exposed as usual. Then it will be easy to have the bullets coinciding with the cartridge chambers formed in the cylinder, said cartridges being easily inserted in their chambers, sufficient pressure being made upon the handles 22 and 23 of

the device, in consequence of which the cartridges will fall by their own weight into the cylinder.

It is to be understood that the forms of my invention herewith shown and described are to be taken as preferred examples of the same, and that various changes in the shape, size, and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

I claim:

1. In a device of the character described, a center piece having a plurality of substantially semi-circular openings formed on its periphery, a pair of substantially semi-circular members arranged around said center piece, said members being provided with openings on their inner faces adapted to cooperate with said semi-circular openings in said center piece, and means for moving said members with respect to said center piece.

2. A device constructed in accordance with claim 1 wherein said semi-circular

members are pivotally connected to each other.

3. A device constructed in accordance with claim 1 wherein said semi-circular members are provided with extensions forming handles.

4. In a device of the character described, a center piece having a plurality of substantially semi-circular openings formed in its periphery, a two-piece member encircling said center piece and provided with a plurality of substantially semi-circular openings adapted to cooperate with the openings in said center piece to form substantially circular openings for the reception of cartridges, handles formed on said member, and a spring arranged between said handles.

5. A device constructed in accordance with claim 1 wherein one of said sets of cooperating openings is provided with lateral cuts to permit ready release of the rim of a cartridge arranged in the opening.

In testimony whereof, I affix my signature.

JORGE GARAY Y SILVA.