

No. 881,437.

PATENTED MAR. 10, 1908.

E. E. NEAL,
LOADING PACK.

APPLICATION FILED JUNE 8, 1907.

Fig. 1.

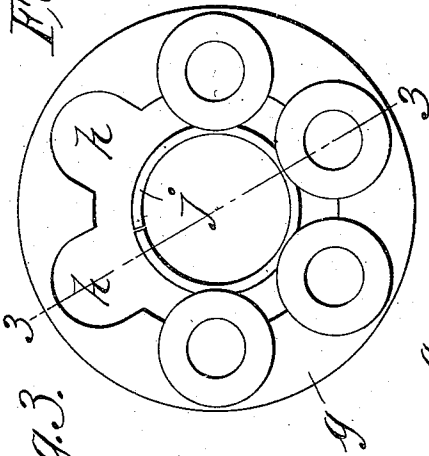


Fig. 2.

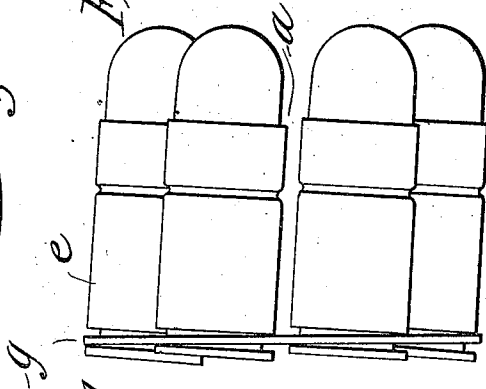


Fig. 3.

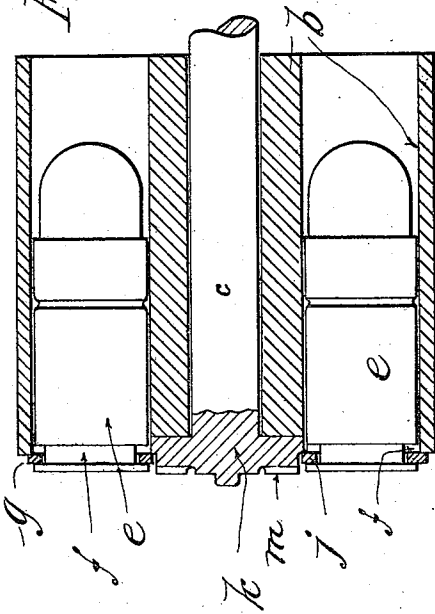
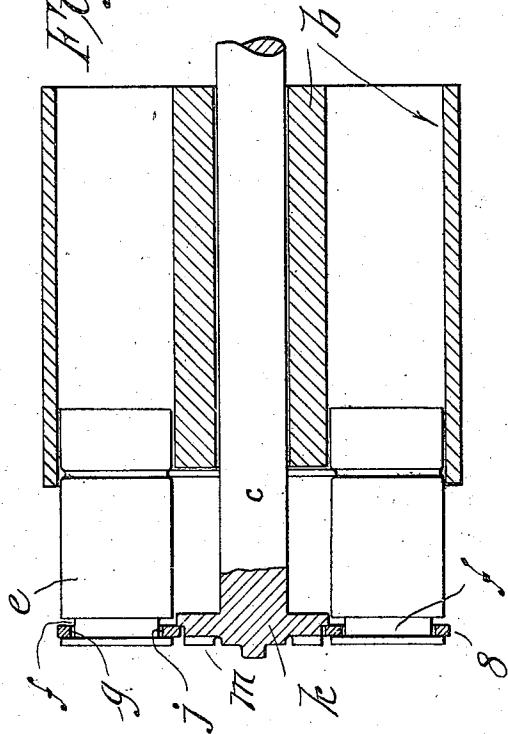


Fig. 4.



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UNITED STATES PATENT OFFICE.

ELMER E. NEAL, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JOSEPH H. WESSON, OF SPRINGFIELD, MASSACHUSETTS.

LOADING-PACK.

No. 881,437.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed June 3, 1907. Serial No. 376,968.

To all whom it may concern:

Be it known that I, ELMER E. NEAL, a citizen of the United States of America, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Loading-Packs, of which the following is a specification.

This invention relates to loading packs for revolvers, the object of the invention being to produce a pack of this character in which, while the cartridges are held securely therein, (that is, in a way which will prevent them from being released from the devices which hold them together in the pack) they will be so loosely held by said devices that the ball ends thereof may always be easily entered in the chambers of the cylinder. This is for the purpose of providing for quick and easy loading of the arm even though the devices which hold the cartridges in pack form may be more or less distorted or bent. Thus the essential feature of this invention is embodied in a pack-structure in which each cartridge is very loosely held by the head, the structure being carried in the arm and being ejected or extracted therefrom as a whole after the shells are empty.

It is conceded that it is not broadly new to construct a loading pack which is carried by the arm in firing, and is, as a whole, extracted therefrom when the shells have been emptied, as such a structure is shown and described in the patent dated October 15, 1901 No. 684,752 to Garfield & Larsson, but in which construction the cartridges are rigidly held in the pack form and consequently any distortion of the cartridges from their position of axial alinement results in a consequent distortion of the pack structure which, when it comes to loading the arm, necessitates straightening the cartridges again into substantial axial alinement before they can be inserted in the cylinder; and, as is well understood, the service conditions under which these packs are used are oftentimes very severe, and as these packs must be carried in a belt on the person of the user, the opportunities for distorting the packs are numerous, more especially in the cavalry service in which the revolver is an important element of the equipment.

This invention is designed to overcome all of the objections inherent in a pack of the

character above described in which cartridges are rigidly secured in their holding devices.

The construction is fully illustrated in the accompanying drawings, in which,—

Figure 1 is an end elevation of the loading pack in its preferred form. Fig. 2 is a side elevation of the same showing the cartridges tipped to one side to illustrate the looseness thereof in their pack form. Fig. 3 is a longitudinal sectional elevation of a revolver cylinder showing the cartridges in pack form in position therein. Fig. 4 is a similar view showing the empty shells in pack form partly extracted from the cylinder.

Referring to these drawings, *a* indicates the loading pack as a whole,— see Figs. 1 and 2. The cylinder of a revolver is indicated by *b* and the extractor by *c*. The cartridge shells *e* are of the rimless type, as a rim would be superfluous in this construction, the only purpose thereof in ordinary shells being to afford easy means of extraction, though if desired a rim shell could be used in connection with the cartridge-holding devices to be described herein. The shells have formed therein, close to the head ends thereof, a circumferential groove *f*, the side walls of which groove are at right angles to the end of the shell, these grooves receiving the devices whereby the cartridges are loosely grouped together in pack-form.

The cartridge holding devices consist of a circular metal plate *g* of annular form, the width of which is preferably somewhat greater than half the diameter of the shells *e*, and in this plate are punched semi-circular recesses *h*, the diameter of which is a little greater than the diameter of the shell at the bottom of the grooves *f*, (as shown in Figs. 3 and 4,) to the end that the shells may fit loosely in these recesses.

The thickness of the annular plate *g* is such as to permit it to be positioned between the recoil-plate of a revolver and the end of the cylinder, and, preferably, the plate is made of relatively soft steel to the end that if in handling the pack this plate should become bent, it will be readily straightened by being forced into the space between the cylinder and the recoil-plate in loading the arm. By making the plate *g* as described and shown in the form of a ring, enough of the center is cut away to easily insert the cartridges in the

recesses *h*, and having been so placed there-
 in, the split ring *j* is contracted and snapped
 into the grooves in the shells, said ring, by
 its expansive action, serving to press the
 5 cartridges outward radially into the bottom
 of the recesses *h*. The split-ring is of the
 same thickness, substantially, as the metal
 plate *g*, and the ends thereof are cut square
 and in its expanded form these bear one
 10 against the other, and as the ring lies within
 the grooves *f*, of the shells, and the latter, at
 the opposite side thereof, are movably held
 in the recesses of the plate *g*, the whole pack
 may be subjected to very great distortion
 15 without effecting a separation of the ends of
 the split ring *j*; and unless the distortion of
 the pack is sufficient to effect this, the pack
 will remain in condition for use, even though,
 as stated, the plate *g* should be more or less
 20 bent.

The internal diameter of the split ring *j* is
 great enough to permit it to slip easily over
 the annular boss *k* on the end of the extrac-
 tor-stem, and on which the ratchet teeth *m*
 25 are cut, by means of which the cylinder is
 rotated in the usual manner in revolving
 firearms. This split ring *j* is so positioned
 that the extractor plate *o* extends under it,
 and all the shells in their pack-form may thus
 30 be extracted simultaneously. No change is
 required in the revolver adapted to use the
 usual rim-shells to adapt it to the use of this
 pack.

From the foregoing description, it is obvi-
 35 ous that to assure the secure interlocking en-
 gagement between the shells and their hold-
 ing devices, the grooves *f* in the shells should
 have walls which are rectangularly disposed
 relative to the axes of the shells, to the end
 40 that any end thrust on the latter in either di-
 rection may not disengage therefrom their
 holding devices.

While the plate *g* and the ring *j* may be so
 cheaply made as to permit them to be thrown
 45 away, the pack may, if desired, be reloaded
 by springing the two ends of the ring past one
 another and contracting the ring to free the
 shells from the plate, whereupon loaded car-
 tridges may be inserted in the recesses in the

plate and the ring sprung into place again to 50
 lock them in place in the plate.

What I claim, is:—

1. A loading pack for revolving firearms
 comprising an annular plate having recesses
 in the inner border thereof to receive grooved 55
 cartridge shells, and a ring sprung into the
 grooves in the shells to hold the latter in
 loose interlocking engagement with said plate
 and ring.

2. A loading-pack for revolving firearms 60
 consisting of an annular plate having recesses
 in the inner border thereof, and an expansi-
 ble element located in the plane of said plate,
 the cartridges having an annular groove near
 the heads thereof to engage both the said 65
 plate and the said expansible element where-
 by the cartridges are maintained loosely in
 pack form in said plate.

3. A loading pack for revolving firearms
 consisting of a perforated plate provided with 70
 a series of recesses in the inner border of
 the perforation to receive a circumferential
 groove formed on the cartridges, an expansi-
 ble element engaging the grooves in the
 cartridges and located in the plane of the 75
 plate, the grooves being substantially rectan-
 gular in cross-section, whereby the car-
 tridges are prevented from longitudinal dis-
 placement.

4. A loading pack for revolving firearms 80
 consisting of a perforated plate provided with
 a series of recesses in the inner border of
 the perforation to receive a circumferential
 groove formed on the cartridges, an expansi-
 ble element engaging the grooves in the car- 85
 tridges and located in the plane of the plate,
 the grooves being substantially rectangular
 in cross-section, and in width less than the
 thickness of the plate and expansible ele-
 ment, whereby the cartridges are permitted 90
 to assume various inclined positions and are
 also prevented from longitudinal displace-
 ment from the plate, as described.

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Witnesses:

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