

Oct. 22, 1935.

J. D. PEDERSEN

2,017,988

CARTRIDGE CLIP

Original Filed Aug. 2, 1929

Fig. 3.

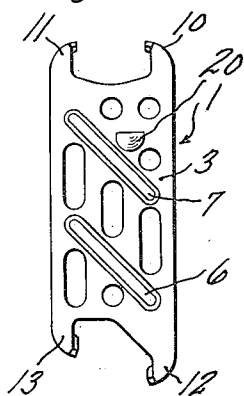


Fig. 4.

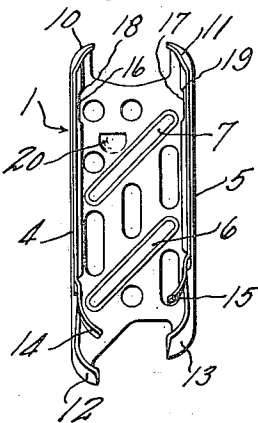


Fig. 6.

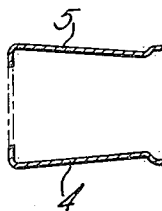


Fig. 1.

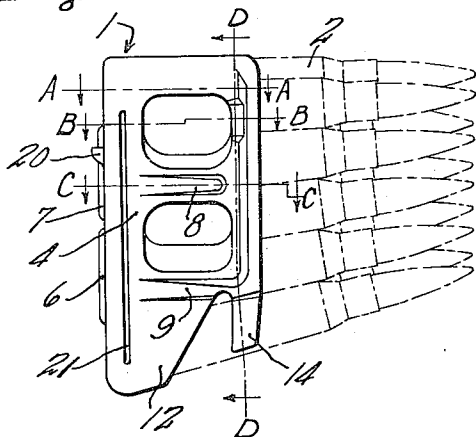


Fig. 2.

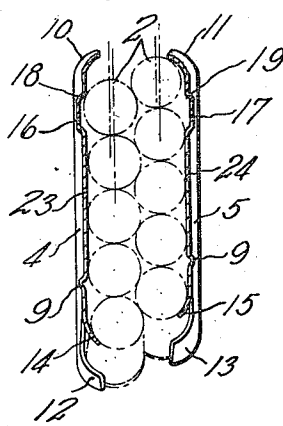


Fig. 5.

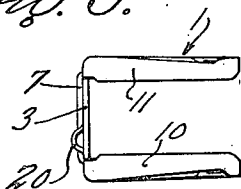


Fig. 8.

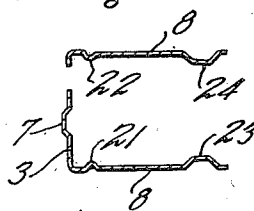
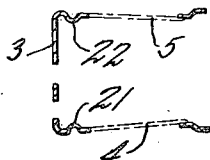


Fig. 7.



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UNITED STATES PATENT OFFICE

2,017,988

CARTRIDGE CLIP

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Application August 2, 1929, Serial No. 383,030
Renewed February 13, 1931

9 Claims. (Cl. 42—87)

This invention relates to cartridge clips of the enblock type wherein a double row of cartridges in staggered mutually engaging relation may be securely held and charged therewith into the magazine of a gun.

An object of the invention is to provide a clip of cheap construction so as to be expandible, which will hold the cartridges as a firm packet outside the gun and which when in the gun will contribute to the proper feeding and guiding of the cartridges for loading.

Further objects and advantages of the invention will become apparent from the following detailed description taken in connection with the accompanying drawing which show the invention in its present preferred form and in which:

Fig. 1 is a side view of the clip and its contained cartridges as a complete packet;

Fig. 2 is a vertical section of the packet along line D—D of Fig. 1;

Fig. 3 is a rear view of the empty clip;

Fig. 4 is a front view of the empty clip;

Fig. 5 is a top view of the empty clip;

Figs. 6, 7 and 8 are horizontal sections of the empty clip taken respectively along the lines A—A, B—B and C—C of Fig. 1.

Referring more particularly to the drawing, the clip as a whole is indicated by the numeral 1 and the cartridges as 2. These cartridges are of the usual form, slightly tapered as shown and having grooved bases (not shown) for extraction after firing.

The clip is designed to hold the cartridges in a double row stack with one row higher than the other, the cartridges being in staggered relation, those of each row resting one upon the other and mutually engaging the cartridges of the other row, as clearly shown in Fig. 2. When the clip is full and ready to be charged into the gun magazine, the stack of cartridges will be tightly held in the compact form shown by a spring clamping action of the clip. The clip comprises a back 3 and two sides 4 and 5 which may be conveniently formed from a one piece stamping of spring metal. The sides 4 and 5 preferably converge in a forward direction toward one another and are spring tempered to firmly clamp the contained stack of cartridges and impart a lateral pressure thereon. The back 3 and the sides 4 and 5 being preferably of thin metal are suitably stiffened by the upset ribs 6, 7, 8 and 9 and cut-out openings are made therein for lightness.

The sides 4 and 5 are each formed at their upper ends with inturned portions 10 and 11, preferably symmetrical and at the same eleva-

tion to act alternately as the upper rest for the higher row of the stack as the same is fed upwardly in the clip by a feeding follower of the gun (not shown). A latching shoulder 20 is provided on the back of the clip adapted for engagement by a latch of the gun (not shown) for retaining the clip in the magazine.

It will be understood that in the operation of a gun with a clip of this character, the bolt or breech closure during its forward movement will pick off the topmost cartridge alternately from each row for loading and that a suitable follower of the gun engaging the bottom of the stack will raise the stack in the clip after the removal of each cartridge from the top thereof. It is not deemed necessary to show such mechanism of the gun but for an example of such a construction reference is made to my co-pending application Serial No. 197,718, filed June 9, 1927.

The sides 4 and 5 of the clip are each formed at their lower ends with spring acting inturned portions 12, 14 on one side and 13, 15 on the other side. The portions 12, 14 are positioned somewhat lower than portions 13, 15 and said respective side portions provide the bottom rest for the lower and upper rows of the stack. The narrow tongue-like portions 14 and 15 particularly are designed to impart a vertical pressure on a full stack contained in the clip, whereby in conjunction with the lateral clamping pressure previously described a firmly held packet is obtained.

At the rear of each side 4 and 5 and adjacent the back are formed inwardly projecting ribs 21 and 22 which extend vertically (as shown in Fig. 1) from a point near the bottom of the clip to a point slightly more spaced from the top. These ribs 21 and 22 are adapted to engage in the grooves, i. e., in front of the extracting shoulders at the bases of the cartridges (not shown), and help to retain the cartridges in the clip and prevent their falling or shaking out when carried as a packet. Preferably the ribs 21, 22 extend high enough to just miss engaging the extracting groove of the top cartridge of an upper row, whereby said cartridge being in the loading position may be more easily picked off the stack in loading.

The sides 4 and 5 extend forwardly from the back 3 a sufficient distance to furnish a good lateral embracing support for the stack and near their forward edges are each formed preferably with a vertically extending guiding rib 23 and 24 which bear in contact with opposite sides of the stack, as shown in Fig. 2. Near the upper end of each guiding rib 23, 24 a small recess 16

and 17 is made by upsetting the metal outwardly slightly to form shoulders 18 and 19, one for each clip side 4 and 5, respectively. The function of the shoulder 18 will be described and it will be understood that shoulder 19 acts in a similar manner when its adjacent row of cartridges is the lower one.

It will be observed in Fig. 2 that the upper row of cartridges is engaged both at the top and bottom by the inturned portions 11, and 13, 15. The lower row on the other hand is engaged at the bottom by the inturned portions 12 and 14, but is spaced from the upper clip portion 10. The stop shoulder 18 is therefore provided to engage the top cartridge of the lower row to prevent possible dislocation of this top cartridge due to the upward pressure from beneath the stack which is occasioned when the stack is full (and either in or out of the magazine) by the spring portions 12, 14 and 13, 15, and when the stack is being fed upwardly by the working pressure of the follower (not shown). The stop shoulder 18 furnishes a sufficient check against any tendency of its engaged top cartridge to tip upwardly under the pressure described and yet will permit said top cartridge to easily ride past the same into engagement with the upper inturned portion 10 after the top cartridge of the higher row has been picked off in loading. The shoulders 18 and 19, therefore, act alternately as a check stop for the top cartridge of the lower row of the stack during the feeding operation of the follower. In use, it is found that the lateral pressure of the clip sides will throw the top cartridge of the higher row very slightly to the left and cause the top cartridge of the lower row to seat partially in the recess 16, behind the shoulder 18, and thus provide the effective stop desired.

Various modifications of the structure as shown are obviously possible without departing from the spirit of the invention as hereinafter claimed.

I claim:

1. A cartridge clip arranged to hold a stack of cartridges in staggered relation formed in a double row with one row higher than the other, said clip comprising a back and two sides for embracing the stack, said sides extending forwardly from said back to engage said cartridges at points distantly spaced from the bases of said cartridges, and the side of said clip engaging the lower row of said stack having a shoulder near its forward edge and below its top edge for abutting the upmost cartridge of said lower row.

2. A cartridge clip arranged to hold a stack of cartridges in staggered relation formed in a double row with one row higher than the other, said clip comprising a back and two sides for embracing the stack, each side of said clip having a projecting ridge adjacent the back for engaging in front of the extracting rim of said cartridges, and the side of said clip engaging the lower row of said stack having a shoulder near its forward edge and below its top edge for abutting the upmost cartridge of said lower row.

3. A cartridge clip arranged to hold a stack of cartridges in staggered relation formed in a double row with one row higher than the other, said clip comprising a back and two sides for embracing the stack, said sides extending forwardly from said back to engage said cartridges at points distantly spaced from the bases of said cartridges, each of said sides having inturned portions at their upper and lower ends, and the side of said clip engaging the lower row of said

stack having a shoulder near its forward edge and below its top edge for abutting the upmost cartridge of said lower row.

4. A cartridge clip arranged to hold a stack of cartridges in staggered relation formed in a double row with one row higher than the other, said clip comprising a back and two sides for embracing the stack, said sides extending forwardly from said back to engage said cartridges at points distantly spaced from the bases of said cartridges, each side of said clip having a projecting ridge adjacent the back for engaging in front of the extracting rim of said cartridges, each of said sides having inturned portions at their upper and lower ends, and the side of said clip engaging the lower row of said stack having a shoulder near its forward edge and below its top edge for abutting the upmost carriage of said lower row.

5. A cartridge clip arranged to hold a stack of cartridges in staggered relation formed in a double row with one row higher than the other, said clip comprising a back and two sides for embracing the stack, said sides extending forwardly from said back to engage said cartridges at points distantly spaced from the bases of said cartridges, and imparting a lateral pressure thereon, each of said sides having inturned portions at their upper and lower ends coacting to impart a vertical pressure on the rows of said stack, and the side of said clip engaging the lower row of said stack having a shoulder near its forward edge and below its top edge for abutting the upmost cartridge of said lower row.

6. A cartridge clip arranged to hold a stack of cartridges in staggered relation formed in a double row with one row higher than the other, said clip comprising a back and two sides for embracing the stack, said sides extending forwardly from said back to engage said cartridges at points distantly spaced from the bases of said cartridges, each side of said clip having a projecting ridge adjacent the back for engaging in front of the extracting rim of said cartridges, and imparting a lateral pressure thereon, each of said sides having inturned portions at their upper and lower ends coacting to impart a vertical pressure on the rows of said stack, and the side of said clip engaging the lower row of said stack having a shoulder near its forward edge and below its top edge for abutting the upmost cartridge of said lower row.

7. A cartridge clip arranged to hold a stack of cartridges in staggered relation formed in a double row with one row higher than the other, the cartridges of each row being stacked one upon the other and in mutual engagement with the cartridge of the other row, said clip comprising a back and two sides for embracing the stack, said sides extending forwardly from said back to engage said cartridges at points distantly spaced from the bases of said cartridges, and the side of said clip engaging the lower row of said stack having a shoulder near its forward edge and below its top edge for abutting the upmost cartridge of said lower row.

8. A cartridge clip arranged to hold a stack of cartridges in staggered relation formed in a double row with one row higher than the other, the cartridges of each row being stacked one upon the other and in mutual engagement with the cartridge of the other row, said clip comprising a back and two sides for embracing the stack, said sides extending forwardly from said back to engage said cartridges at points distantly

5 spaced from the bases of said cartridges, each side of said clip having a projecting ridge adjacent the back for engaging in front of the extracting rim of said cartridges, each of said sides having in-
turned portions at their upper and lower ends, and the sides of said clip engaging the lower row of said stack having a shoulder near its forward edge and below its top edge for abutting the up-
most cartridge of said lower row.

10 9. A cartridge clip arranged to hold a stack of cartridges in staggered relation formed in a double row with one row higher than the other, the cartridges of each row being stacked one upon the other and in mutual engagement with the car-
tridge of the other row, said clip comprising a

back and two sides for embracing the stack, said sides extending forwardly from said back to en-
gage said cartridges at points distantly spaced from the bases of said cartridges, each side of said clip having a projecting ridge adjacent the
back for engaging in front of the extracting rim of said cartridges and imparting a lateral pres-
sure thereon, each of said sides having inturned portions at their upper and lower ends coacting
to impart a vertical pressure on the rows of said
stack, and the side of said clip engaging the lower
row of said stack having a shoulder near its for-
ward edge and below its top edge for abutting the
upmost cartridge of said lower row.

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