

H. SUNNGÅRD.  
MAGAZINE FOR GUNS.  
APPLICATION FILED FEB. 11, 1910.

979,721.

Patented Dec. 27, 1910.

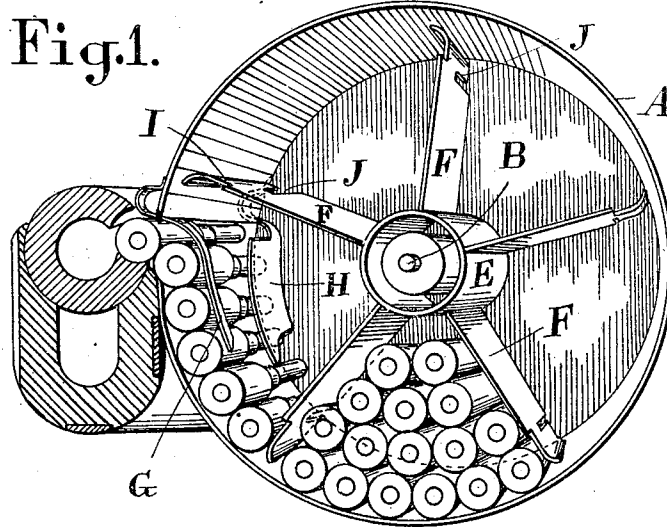


Fig.2.

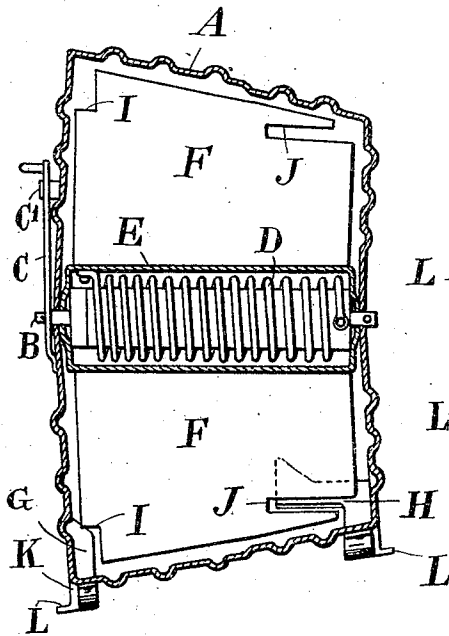
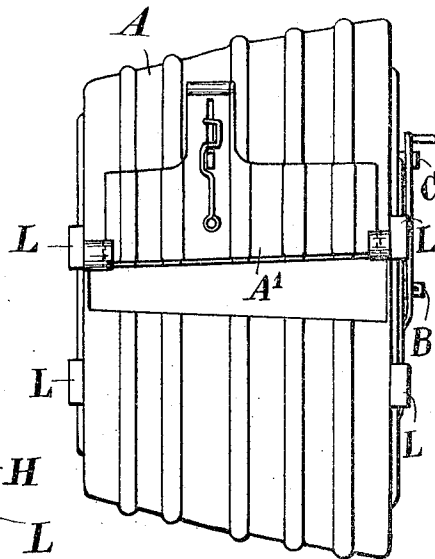


Fig.3.



Witnesses  
C. Rommers  
May Ellis

Inventor  
Harald Sunngård  
By *Henry Orth* atty

# UNITED STATES PATENT OFFICE.

HARALD SUNNGÅRD, OF CHRISTIANIA, NORWAY.

MAGAZINE FOR GUNS.

979,721.

Specification of Letters Patent.

Patented Dec. 27, 1910.

Application filed February 11, 1910. Serial No. 543,289.

*To all whom it may concern:*

Be it known that I, HARALD SUNNGÅRD, a subject of the King of Norway, residing at Kongensgate 33, Christiania, Norway, have  
5 invented certain new and useful Improvements in Magazines for Guns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to  
10 which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

15 My invention relates to detachable cartridge magazines for automatic rifles and machine guns and has for its object to provide a magazine that, in proportion to the weight, price and volume of the cartridges  
20 contained is so cheap, light and relatively small that when used in war the magazines are considered simply as packages and therefore at moments of the fight when time is too precious to permit of refilling the maga-  
25 zines are thrown away, at any rate temporarily, as soon as empty, to be substituted in a few seconds by the attachment to the firearm of fresh package magazines.

In the accompanying drawing I have  
30 shown one form of magazine embodying my invention; Figure 1 being a perspective view of the magazine as applied to a rifle, the rear wall being removed. Fig. 2 is an axial section through the magazine, and Fig. 3 a  
35 side view.

In the center of a preferably conical drum A, the walls of which may be corrugated for strengthening the same, is mounted an axle  
40 B which may be turned by means of a flexible arm C, capable of being arrested in a notch or between projections C' on the outside of the drum.

Around the axle B and connected with the same by means of a spiral spring D is  
45 placed a tube E, which forms the hub of a wing wheel whose wings F nearly but not wholly fill the space between the hub and the periphery of the drum. The side wall of the magazine has an opening, through  
50 which the cartridges pass out one by one and said opening may be closed by a lid, as shown at A<sup>1</sup>, Fig. 3. These spring-actuated rotatable wings or partitions F divide the interior of the magazine into sector-shaped compartments, each holding several  
6 cartridges lying loose and promiscuous, said

compartments being of such dimensions that the maximum distance between the partition walls is just sufficiently less than the length of the cartridges to prevent the latter from  
60 tipping over or turning endwise. The cartridges are left to arrange themselves in the compartment that at any time is in the lowermost position simply by force of gravitation, so that the cartridges in this compartment  
65 lie next to and form distinct rows along the interior of the magazine.

G and H indicate curved guide wings attached to the end-walls of the drum at the opening, and serve to cut out from the inner  
70 layers of cartridges the layer or row which at the moment is in the peripheral row, and thereby insure the entrance of these cartridges into the breech opening in good order. It may happen, however, especially  
75 when the magazine is half emptied, that a cartridge lying in the second row will tilt down so that the projectile or bullet will be among the cartridges of the lowermost row, and so might stop the operation of the maga-  
80 zine on account of its projectile, and not its shell, coming under the guide wings of the delivery mouth. According to my invention this tilting of the cartridges is counteracted by making the guide wing H that lies  
85 over the projectile broad enough to reach nearly to the breast of the cartridge, and, furthermore, by beveling the interior end of said wing and so tapering it inward that the projectile of the tilting cartridge is thereby  
90 lifted up and caused to pass over or above the guide wing, instead of being caught under it or stopping up against the same, which would entirely stop the action of the magazine.  
95

The magazines when fully charged hold as many cartridges as are contained in all the sector-shaped compartments of the magazine, and, as explained above, these sector-shaped  
100 compartments shall be neither of less nor of larger dimensions than to just prevent the last cartridges of a nearly emptied magazine-compartment from tipping over or turning endwise. Small magazines of about  
105 60 cartridges are provided with four rotatable partition walls; medium-sized magazines of about 80 cartridges have 5 rotatable partition walls; and large magazines of about  
110 100 cartridges have 6 rotatable partition walls.

I and J designate slots cut in the wings F to allow them to pass the guide wings.

The magazine may be attached to the gun in any convenient manner for instance by way of projections K having ribs L fitting into the pockets or notches on the gun.

- 5 The operation is as follows: When the magazine is filled the axle B is turned around by means of the arm C so as to give tension to the spring; the arm is then arrested. As cartridge by cartridge is taken away from  
10 the magazine by the breechbolt of the gun, the spring will cause the feed wheel to be turned and so the cartridges one after one, row after row all around will be pressed into the breech opening of the gun.

- 15 I claim:—

A detachable magazine for guns, comprising a casing, cylindrical in cross section, a rotatable hub journaled in the casing, of  
20 small diameter as compared with the diameter of the casing, a plurality of wings ex-

tending from the hub to near the periphery of the casing forming sector-shaped compartments of such dimensions that a plurality of cartridges are adapted to lie loosely therein, the distance between the outer ends 25 of the wings being slightly less than the length of the cartridges to prevent a complete endwise movement of the latter, and guide ribs projecting from a delivery slot in the casing into the path of the wings, said 30 wings having notches to permit them to pass the guide-ribs.

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

HARALD SUNNGÅRD.

Witnesses:

HENRY BORDMEISTER  
M. GUTLORMSEIR.