Aug. 20, 1946. R. C. CHAVEZ 2,406,135

EXPLOSIVE SHELL

Filed April 12, 1943

Fig. 1.

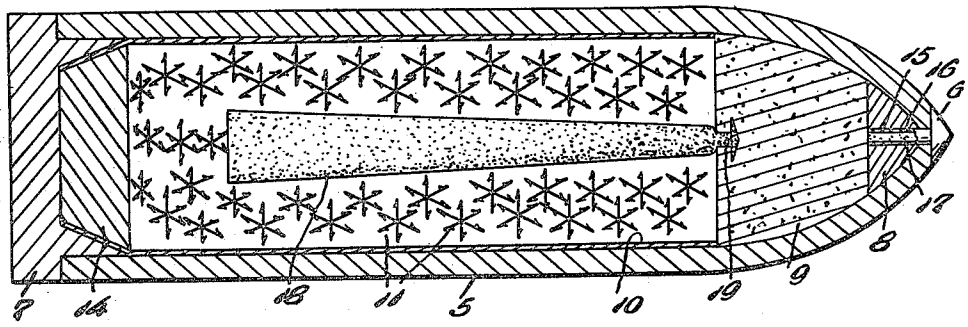


Fig. 2.

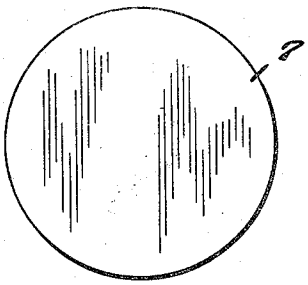


Fig. 3.

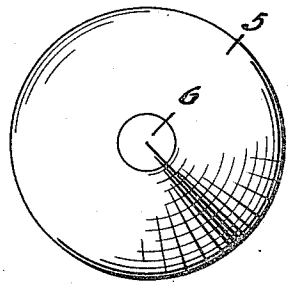
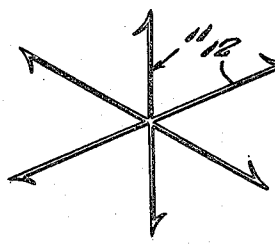


Fig. 4.



Inventor

Reinaldo C. Chavez

By Clarence O'Brien and Harvey B. Jacobson *Attorneys*

Patented Aug. 20, 1946 2,406,135

UNITED STATES PATENT OFFICE

2,406,135

EXPLOSIVE SHELL

Reinaldo C. Chavez, Santa Rosa, N. Mex.

Application April 12, 1943, Serial No. 482,746

2 Claims. (Cl. 102—92)

1

The present invention relates to new and useful improvements in explosive shells of a type known as shrapnel shells and has for its primary object to provide an internal body or container within which the missiles or shrapnel are carried and adapted for bodily discharging the container from the shell after the latter has reached its target and providing an explosive charge in the container carrying the shrapnel for exploding the container and discharging and scattering the missiles or shrapnel over the surrounding area.

A further object is to provide an explosive shell of this character in which the inner container for the missiles or shrapnel is also provided with a narcotic or medicinal preparation with which the missiles come into contact for deadening the senses of persons struck by the missiles.

An additional object is to provide a device of this character of simple and practical construction, which is efficient and reliable in performance, relatively inexpensive to manufacture, and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawing, forming part hereof, wherein like numerals refer to like parts throughout and in which:

Figure 1 is a longitudinal sectional view of the shell.

Figure 2 is a rear elevational view.

Figure 3 is a front elevational view, and

Figure 4 is a detail of one of the shrapnel missiles.

Referring now to the drawing in detail, the numeral 5 designates the shell casing having a percussion cap 6 of conventional construction mounted in its nose or front end, the shell being hollow and open at its rear end and provided with a closure cap 7 frictionally fitted in position at the rear end of the shell.

Positioned in the nose end of the shell is a weight 8 adapted to keep the nose of the shell pointing downwardly when the same is dropped from an airplane or when its forward flight is spent to cause contact of the percussion cap with the target and behind the weight 8 the shell is provided with an explosive charge 9.

Positioned in the shell immediately behind the explosive charge 9 and snugly fitted therein, is a container 10, preferably constructed of substantially heavy wax paper or other frangible

2

material and which is substantially filled with a quantity of missiles designated generally at 11 and which comprise a plurality of needle-like members 12 of magnetized metal radiating from a common center and having barbs 13 formed at their outer ends. The rear end of the container 10 is closed by a wax plug or cap 14.

The weight 8 is provided with a longitudinal bore 15 having a tube 16 therein and through which a fuse 17 extends leading from the cap 6 to the charge 9.

The container 10 is also provided with a longitudinally extending explosive charge container 18 which includes a short fuse 19 extending through the front end of the container 10 and terminating in the explosive charge 9. The explosive charge container 18 is preferably constructed of waterproof material.

When firing the shell, the explosive charge 9 is fired when the nose strikes a target and without breaking the shell 5, thus ejecting the container 10 bodily and unbroken from the rear of the shell. The short fuse 19 will then ignite the charge 18 causing an almost immediate bursting of the container 10 to thus scatter the missiles over a wide area.

Also after the container 10 has been filled with the missiles 11 and prior to closing the rear end thereof by the cap 14, the container 10 is supplied with a suitable narcotic or medicinal preparation preferably in the form of a thin paste and with which the missiles come into contact and which will serve to deaden the senses of a person struck by the missiles upon the explosion of the container or upon the pricking of the hands or other parts of the body of a person by the missiles after the missiles have fallen. By magnetizing the missiles, the same will adhere to any metal surface with which they come into contact and will thus serve to provide a constant menace for persons liable to contact them.

It is believed the details of construction and manner of use of the device will be readily understood from the foregoing without further detailed explanation.

Having thus described the invention what I claim is:

1. An explosive shell comprising a shell casing having an open rear end and a tapering nose provided with a percussion cap, a frangible shrapnel container in the casing, an explosive charge in front of the container, a closure for the rear end of the casing and adapted to be removed together with the container upon ignition of the charge, an explosive charge in the

container and having a fuse communicating with said charge, a fuse leading from the percussion cap to said charge, and multi-pronged missiles in the container having an anesthetic coating thereon.

2. An explosive shell comprising a shell casing having an open rear end provided with a removable plug, a shrapnel container of frangible material within the casing, an explosive charge in the casing in front of the container, said charge

being adapted to remove the plug and to discharge the container from the casing, a plurality of missiles in the container having a multiplicity of barbs, an anesthetic solution in the container in contact with the missiles, and adapted to provide the missiles with a coating of the solution, and an explosive charge in the container having ignition communication with said charge.

REINALDO C. CHAVEZ.