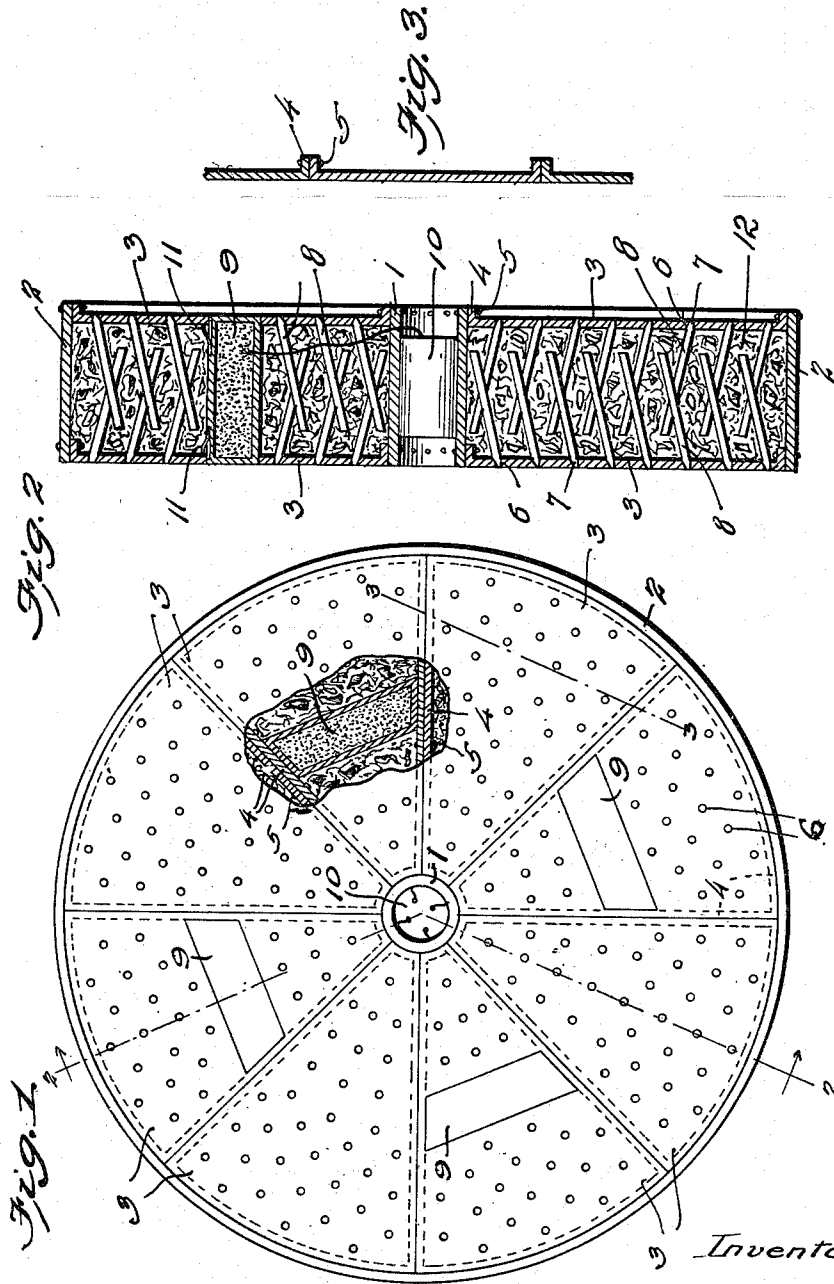


W. L. PETERSON.
EXPLOSIVE PROJECTILE.
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1,279,422.

Patented Sept. 17, 1918.



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UNITED STATES PATENT OFFICE.

WALTER L. PETERSON, OF LYONS, NEBRASKA.

EXPLOSIVE PROJECTILE.

1,279,422.

Specification of Letters Patent. Patented Sept. 17, 1918.

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To all whom it may concern:

Be it known that I, WALTER L. PETERSON, a citizen of the United States, residing at Lyons, in the county of Burt and State of Nebraska, have invented new and useful Improvements in Explosive Projectiles, of which the following is a specification.

My present invention pertains to explosive projectiles; and it has for its object to provide an explosive projectile in the form of a wheel, designed more especially to be dropped on enemy quarters or to be propelled toward the enemy, and embodying such construction that it will be reduced to small portions of metal when it explodes and such portions will be forcibly scattered throughout a considerable area with a view to inflicting great injury on the men and property of the enemy.

The invention also contemplates providing the projectile with incendiary means, designed when the projectile explodes to be ignited and to scatter fire in the vicinity of the explosion.

Other objects and advantages of the invention will be fully understood from the following description and claim when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:

Figure 1 is a side elevation, partly in section of the explosive projectile constituting one embodiment of my invention.

Fig. 2 is a diametrical section of the same, taken in the plane indicated by the line 2—2 of Fig. 1.

Fig. 3 is a detail section taken on the line 3—3 of Fig. 1 and showing the manner of relatively arranging and connecting the sector-shaped side sections of the casing body.

Similar numerals of reference designate corresponding parts in all the views of the drawings.

My novel wheel-form explosive projectile comprises a central transverse tubular member 1, a rim 2 of circular form, and sector shaped side sections 3, flanged along their edges, as indicated by 4 and bolted or riveted together and to the central tubular member and the rim, as indicated by 5. These elements are preferably of cast iron in order to assure them being reduced to small fragments upon explosion of the projectile, and in combination they form the casing body of the projectile.

Scattered throughout the area of each sec-

tor-shaped side section 3 are diagonal transversely-disposed tapered sockets 6. These sockets 6 are diminished in diameter outwardly and are designed to receive and hold by frictional contact the tapered end portions 7 of spikes 8 which are arranged diagonally in the casing body as illustrated. The diagonal disposition of the sockets 6 in the sections 3 is designed to facilitate the breaking of the sections into small fragments, and by virtue of the spikes being held by frictional contact in the said sockets the spikes incidental to the explosion of the projectile are adapted to be thrown from the section fragments and scattered forcibly throughout a wide area.

Arranged and suitably secured in the alternate compartments formed in the casing body between the flanges of the side sections 3 are boxes 9 designed to contain a high explosive which *per se* forms no part of my invention and may, therefore, be of any character compatible with the purpose of the projectile. The explosive in the boxes 9 may be fired by percussion fuses (not shown) or by any other means without involving departure from the scope of my invention. I prefer, however, to effect the ignition of the explosive in the several boxes 9 simultaneously through the medium of an electric time fuse 10 disposed in the central tubular member 1 of the casing body and electrically connected with the interiors of the several boxes 9. The said time fuse 10 and the electrical connections complementary thereto may be of the ordinary or any other approved type, and I have therefore deemed it unnecessary to illustrate the same in detail.

In the preferred embodiment of my invention I arrange to slide the boxes 9 into position in the casing body precedent to the fastening of the side sections 3 at one side of the casing body, and I also arrange to secure each box in position through the medium of a safety lock device 11.

When deemed expedient the hollow spaces in the casing body may be packed with cotton waste or other suitable absorbent material saturated with gasoline or other suitable hydrocarbon, this with a view to enabling the projectile when it explodes to scatter fire as well as fragments of metal.

My novel projectile may be dropped from aeroplanes or may be propelled by any suitable means against the enemy, and when

the explosive in its boxes 9 is ignited it will be effectually reduced to fragments which will be powerfully impelled throughout a considerable area with the result that great
5 damage will be inflicted upon the personnel and the property of the enemy; also, when the casing body is charged with cotton waste 12 or the like impregnated with gasoline or other suitable hydrocarbon the explosion
10 of the projectile will be attended by the effectual spreading of fire and the havoc created among the enemy will be correspondingly increased.

Manifestly the wheel or circular form of
15 the projectile is materially advantageous inasmuch as it tends to assure movement of the projectile after the first contact against the objective, and consequently increases the destructive capacity of the projectile.

20 I have entered into a detailed description of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear and exact
25 understanding of the said embodiment. I do not desire, however, to be understood as confining myself to the said specific construction and relative arrangement of parts since in the future practice of the invention
30 various changes in the form and construc-

tion and assembling of the various elements may be made without involving departure from the scope of my appended claim.

Having described my invention, what I claim and desire to secure by Letters Patent, is:

The herein described wheel-form explosive projectile comprising a body having sector-shaped side sections fastened in the body and forming the side walls thereof
40 and having closely arranged transversely and diagonally disposed tapered sockets diminished in diameter outwardly, transversely and diagonally disposed spikes arranged in the body and having tapered end
45 portions arranged and held by frictional contact in the sockets of the side sections; the spikes fastened at one side of the body being arranged in lapped relation with the
50 spikes fastened at the opposite side of the body, explosive carried in the body, and means also carried in the body for firing the explosive.

In testimony whereof I have hereunto set my hand in presence of two subscribing
55 witnesses.

WALTER L. PETERSON.

Witnesses:

E. S. WIGTON,

W. C. HEINTZELMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."