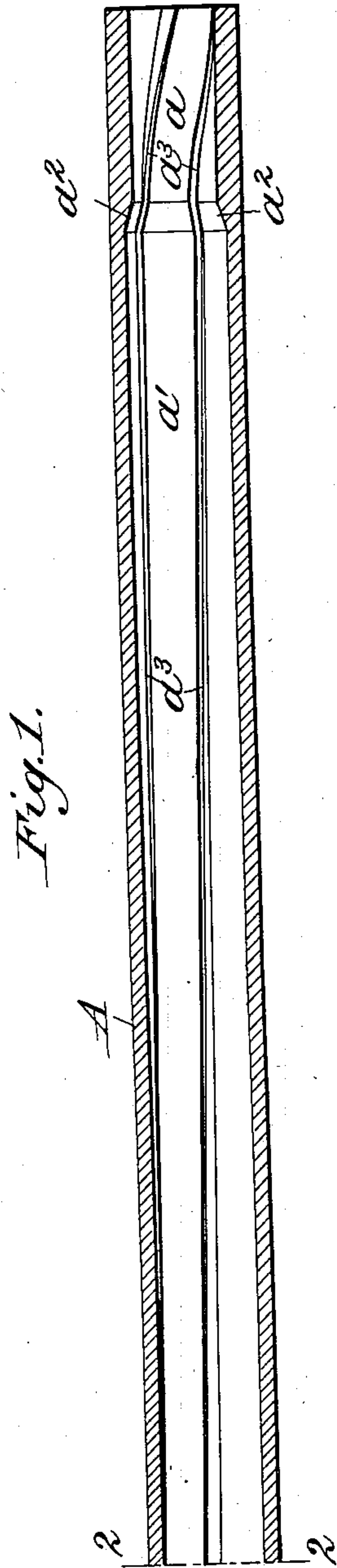


(No Model.)

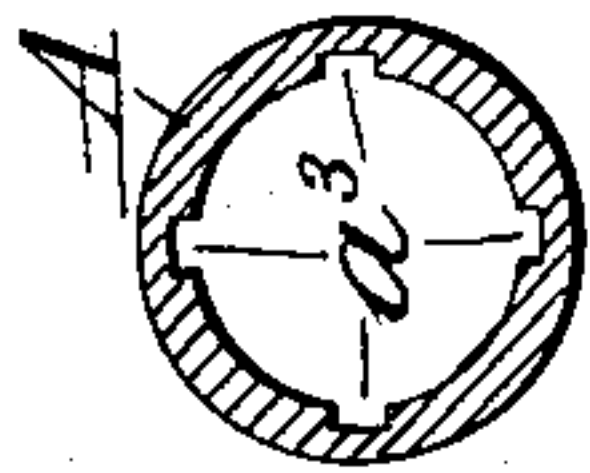
P. OBERHAMMER.  
GUN BARREL.

No. 592,437.

Patented Oct. 26, 1897.



*Fig. 2.*



Witnesses

*H. B. Schott*  
*M. C. Massie.*

Inventor  
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by *Max Herzog*  
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## UNITED STATES PATENT OFFICE.

PETER OBERHAMMER, OF MUNICH, GERMANY, ASSIGNOR OF ONE-HALF TO  
ALBERT GERSTENDÖRFER AND GEORGE MEIER, OF NEW YORK, N. Y.

## GUN-BARREL.

SPECIFICATION forming part of Letters Patent No. 592,437, dated October 26, 1897.

Application filed October 25, 1895. Serial No. 566,908. (No model.)

*To all whom it may concern:*

Be it known that I, PETER OBERHAMMER, a citizen of the Kingdom of Bavaria, residing at Munich, Bavaria, Germany, have invented  
5 certain new and useful Improvements in Gun-Barrels, of which the following is a specification.

My invention relates to an improvement in gun-barrels, and particularly to barrels intended for firing shot.

The object of my invention is to increase the range of a shotgun, and this I do by improving the concentrating power of the gun.

My invention consists in providing the barrel with riflings, which cause a rotation of the shot charge as a whole, and with a choke-bore near the muzzle of the gun in order to overcome the centrifugal force caused by the said rotation, which force, if not counteracted,  
20 would cause a wide dispersion of the shot immediately upon leaving the muzzle of the gun.

Guns intended chiefly for firing bullets and provided with riflings have heretofore been used at times for firing shot charges, but, as  
25 is well known, the charges thus fired are so scattered by the centrifugal force of the whole shot charge that the "shooting power" of such a rifled gun is much less than that of a smooth-bore gun.

Guns specially intended for firing shot have been made with choke-bores and without riflings, the choke-bore causing a crowding inward of the individual shot pellets toward the center of the whole charge, whereby said  
35 charge travels for a long distance from the muzzle of the gun until the centripetal effect caused by the choke-bore has been overcome by the resistance of the air, whereupon the shot will commence to scatter.

So far as I am aware the use of riflings in connection with the firing of shot charges has always been considered a detriment heretofore, owing to the scattering effect of the rotations of the shot charge, and it has been  
45 proposed in one instance, when adapting a rifled gun for bullets to the firing of shot also, to counteract the centrifugal force acquired by the shot by enlarging the bore near the muzzle and then contracting it again and providing such portion of the bore with straight  
50 non-twisting grooves to destroy the rotary mo-

tion imparted to the shot. I have found, however, that such riflings in the bore of the gun-barrel may be utilized in such a way that, instead of being a disadvantage, they may become a means of increasing the range of the gun and preventing the scattering of the shot charge. This result I have accomplished by combining with a gun-barrel whose main portion is rifled interiorly a choke-bore at  
60 the muzzle end of the gun-barrel. I have thereby succeeded in increasing the range of the gun, or, in other words, improving the concentration, by employing the riflings for rotating the shot charge as a whole and a  
65 choke-bore near the muzzle of the gun for destroying the centrifugal force of the rotation without stopping such rotation, whereby the charge overcomes the resistance of the air better and thereby travels quicker and to a  
70 greater distance, this increase in range or improvement in concentration being due to the combined effect of both the riflings and the choke-bore.

My invention will now be more specifically described, in connection with the accompanying drawings, in its preferred form, and then pointed out in the claims.

In the drawings, Figure 1 is a longitudinal central section of a gun-barrel embodying my  
80 invention. Fig. 2 is a transverse section of the same on the line 2 2, Fig. 1.

Referring to the drawings, A is the gun-barrel. The bore of the barrel is contracted near the muzzle end, so as to form a choke-bore  $a$ ,  
85 the caliber  $a'$  of the main portion of the barrel being connected with the choke-bore  $a$  by a transition-cone  $a^2$ . The barrel is also rifled, the riflings being shown at  $a^2$ , said riflings extending through the main portion of the barrel and, preferably, also through the choke-bore and the transition-cone. Furthermore,  
90 the riflings are preferably made with a constant twist at the butt-end of the barrel and with a progressive twist at the muzzle end, as clearly shown in the drawings.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A gun-barrel for shooting shot charges, said barrel having riflings and being provided with a choke-bore near its muzzle end.



2. A gun-barrel having a reduced caliber at its muzzle end, the two calibers being connected by a transition-cone, said barrel also having riflings extending throughout the portion of reduced caliber and the transition-cone, substantially as set forth.

3. A gun-barrel having a reduced caliber at its muzzle end, the two calibers being connected by a transition-cone, said barrel also having riflings of a progressive twist extending throughout the portion of reduced caliber and the transition-cone, substantially as set forth.

4. A gun-barrel having a reduced caliber at

its muzzle end, the two calibers being connected by a transition-cone, said barrel also having riflings of a progressive twist in the reduced portion and riflings of a constant twist in the butt-end of the barrel, substantially as set forth.

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

PETER OBERHAMMER.

Witnesses:

A. M. CONSUELO,  
KARL MAYER.