S. M. KASS.

TRENCH WEAPON.

APPLICATION FILED JULY 3, 1918.

1,376,888.

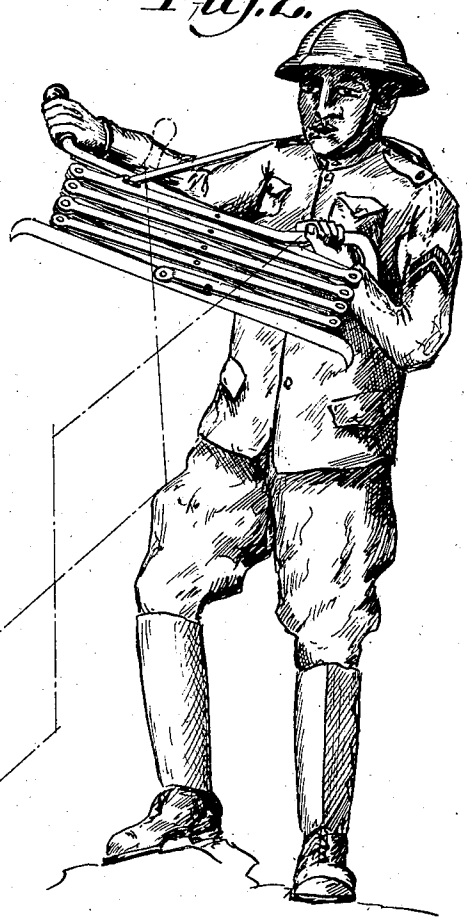
Patented May 3, 1921.

2 SHEETS—SHEET 1.

Fig. 1.



Fig. 2.



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Fig. 3.

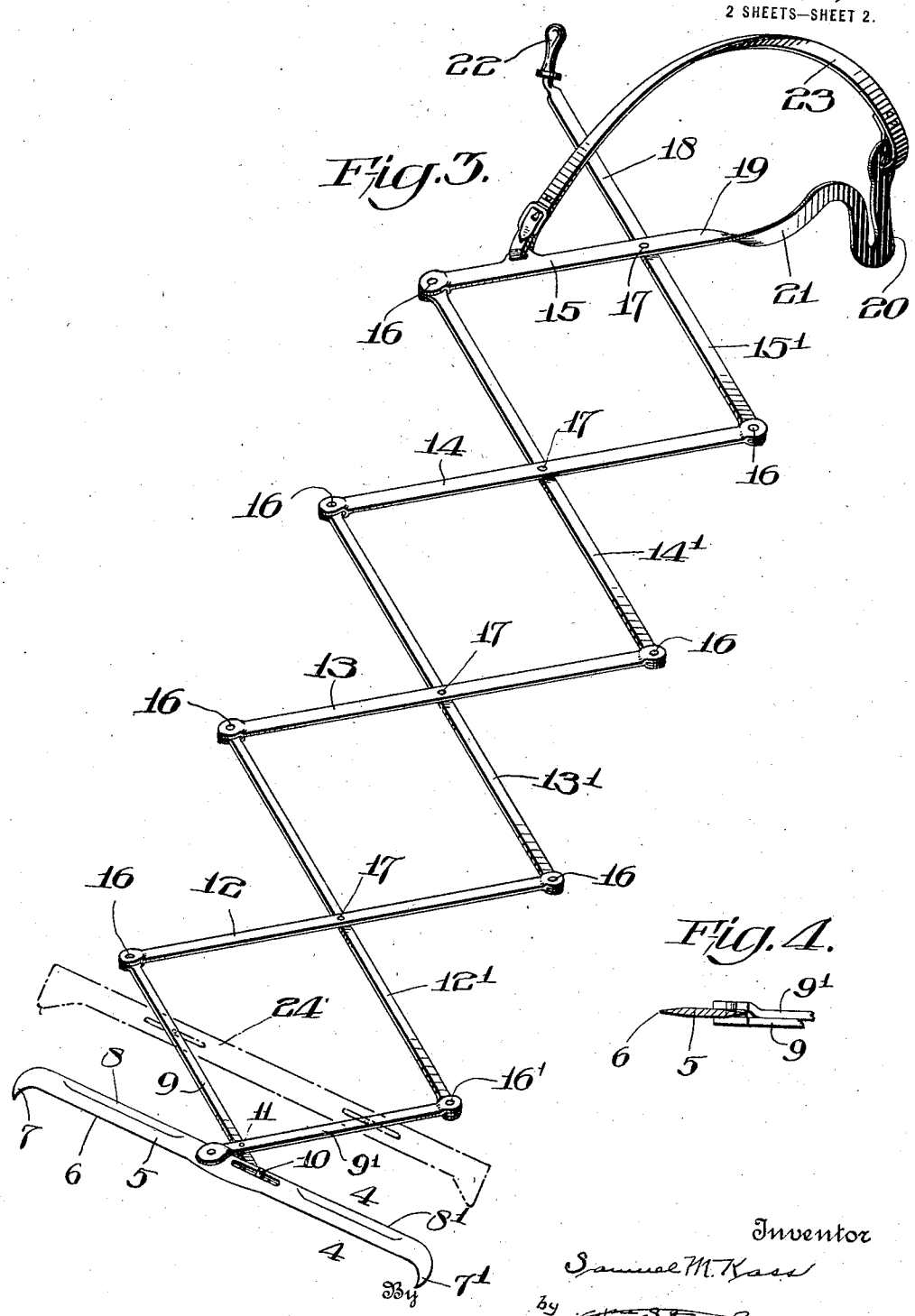


Fig. 4.

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UNITED STATES PATENT OFFICE.

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TRENCH-WEAPON.

1,376,888. Specification of Letters Patent. Patented May 3, 1921.

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To all whom it may concern:

Be it known that I, SAMUEL M. KASS, a "citizen" of Russia according to his best information, residing at 1828 Market street, Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a certain new and useful Trench-Weapon, of which the following is a specification.

My invention relates to weapons suitable for hand-to-hand conflict in front line positions, and particularly for the type of warfare known as trench warfare.

The purpose of my invention is to enable a soldier to project a knife with great speed, force and accuracy and to recover it again.

A further purpose is to extend the force and range of knife attack in trench warfare.

Further purposes will appear in the specification and in the claims.

I have preferred to illustrate my invention by but one form thereof, selecting one which is practical and highly efficient and which at the same time well illustrates the principles of my invention.

Figure 1 is a perspective view of a soldier carrying one of my weapons.

Fig. 2 is a front elevation showing the soldier in the act of using the weapon.

Fig. 3 is a perspective view of the weapon alone in extended position.

Fig. 4 is a section of Fig. 3 taken upon the line 4—4.

In the drawings similar numerals indicate like parts.

The conditions of modern warfare in the front line give a tremendous advantage to one who can strike a hard blow at a distance quickly enough to take the adversary by surprise and disable him before he can reach the other or throw a bomb at him.

My invention provides a knife of any suitable character with a machine for quickly and easily projecting the knife with terrific force without losing it.

The invention in its broadest aspect comprises a cutting weapon with a hand-operated projecting mechanism which itself strikes the blow.

In the drawing the knife 5 is shown as presenting its side edge forward, transverse to the direction of movement of the projecting mechanism, here shown of lazy tongs form. Obviously the knife could be of any shape and could be driven point first or at any angle desired.

I prefer the transverse knife because of the greater section of the enemy which it will cover when projected, because of its utility in cutting wire entanglements and because it is less likely to be deflected from the enemy.

The knife is sharpened along its entire edge 6 and terminates in sharpened projections or prongs 7—7′ which further assist in preventing deflection and open the cut when the knife strikes first at the end.

In order to avoid holding of the knife by an enemy, I sharpen its rear as well as the front edge through any desired extent shown as 8—8′ in Fig. 3.

The knife is carried at the outer ends of two lazy tongs arms 9—9′, one or both of which are connected with the knife by pin and slot connection as at 10 so as to maintain the knife in parallel positions while permitting its extension and retraction.

The arms are pivoted at 11 and are connected with other arms 12—12′, 13—13′, 14—14′, 15—15′, of any suitable number and size, pivoted at their outer ends as at 16 and at intermediate points such as 17, to form a complete lazy tongs, capable of extension and retraction by closing or opening the ends 18, 19 intended to lie nearest to the body of the operator.

One of the ends such as 19 is provided with a brace 20 perpendicular to the plane of the tongs for the purpose of readily maintaining the tongs in any plane with respect to the horizontal that is desired, and the same end is curved as at 21 to conveniently fit and slide around the body of the operator to any position of intended use, so as to give the benefit of the support of the body of the operator against the curved portion 21 and brace, and to permit the operator to press the brace by his arm on the outer side and to grip the curved part of the end to steady it against his body.

The opposite end 18 is provided with an operating handle 22 to be grasped by the operator.

For convenience in carriage and in partial support of the weapon during use, it is provided with a carrying strap 23 which

may be attached at different points preferably of the same member 15.

A shield 24 shown in dotted position in Fig. 3 may be secured by pin and slot connection to the arms 9—9′ to overhang the knife and protect against accidental injury from the knife.

The lazy tongs construction requires less frame strength at the outer end than at the end nearest to the body and for that reason the arms of the tongs are graduated in weight and strength, the heaviest arms being nearest to the operator.

When not in use the weapon is carried in the position shown in Fig. 1, with or without such a guard 24, as the conditions of service may justify.

When it is intended to be used it is thrown up and forward to some such position as that shown in Fig. 2. This particular position is that intended for launching the knife in a forwardly and downwardly direction against an enemy in front of and below the soldier. The brace 20 may be rested against the body of the soldier, throughout all or a part only of its length, according to the position of the weapon, to steady it. At the same time an intermediate portion is grasped by the soldier with one hand to further steady it while he launches it by the other hand.

A quick pull upon the handle projects the weapon to its entire length quickly, accurately and with surprising force. It may be instantly withdrawn by reverse movement of the handle.

I am aware that the lazy tongs construction has been used on a pistol to extend a knife along the pistol barrel but with the very marked difference from my invention that this is merely a setting or adjusting device for the knife itself and that the blow is struck by bodily movement of the pistol; and not for the purpose of striking the blow by the projection of the lazy tongs.

It will be obvious that various changes may be made by those skilled in the art in view of the disclosure herein which will attain a part, at least, of the advantage hereof and fall within the scope of my claims.

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

1. In a trench weapon, a lazy tongs, bridging means for throwing and restricting a weapon, in combination with a knife carried thereby having its blade transverse to the direction of throw of the lazy tongs during the greater part of the movement of the lazy tongs.

2. In a trench weapon, a lazy tongs, bridging means for throwing and restricting a weapon, in combination with a knife carried thereby having its blade transverse to the direction of throw of the lazy tongs at the termination of the throw of the lazy tongs.

3. In a trench weapon, a transversely fixed knife in combination with lazy-tongs-projecting means for throwing and retracting the knife.

4. In a trench weapon, a lazy tongs throwing and retracting mechanism in combination with a knife transverse to the direction of movement of lazy tongs and sharpened prongs at intervals projecting in front of the knife.

5. In a trench weapon, a knife having terminal sharpened prongs and a lazy tongs mechanism therefor, throwing the knife transversely to its blade, one arm of the lazy tongs being provided with a brace to rest against the body of the wearer.

6. In a trench weapon, a brace adapted to rest against the body of the operator, a lazy tongs construction connected therewith and a knife adapted to be projected by the lazy tongs to strike a blow.

7. In a trench weapon, a knife, a lazy tongs carrying the knife and having one arm of the lazy tongs extended across the plane of the tongs to fit the body of the wearer and a handle for projecting the tongs to strike with the knife and retract the same.

8. In a trench weapon, a knife, a lazy tongs carrying the knife and having one arm of the lazy tongs adapted to rest against the body of the wearer and a carrying strap adapted to assist in the support of the lazy tongs in operation.

9. In a trench weapon, a lazy tongs projecting device, a knife carried thereby and a guard supported by the lazy tongs and projecting the knife in retracted position.

10. In a trench weapon, a knife, projecting means adapted to rest against the body of the wearer and operating transversely to the length of the knife and a guard for the knife in retracted position, also transverse to the direction of operation of the projecting means.

SAMUEL M. KASS.

Witnesses:
WILLIAM P. J. MURRAY,
ADA H. YERKES.