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R. C. COUPLAND
CLINOMETER FOR A RIFLE
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2,048,687

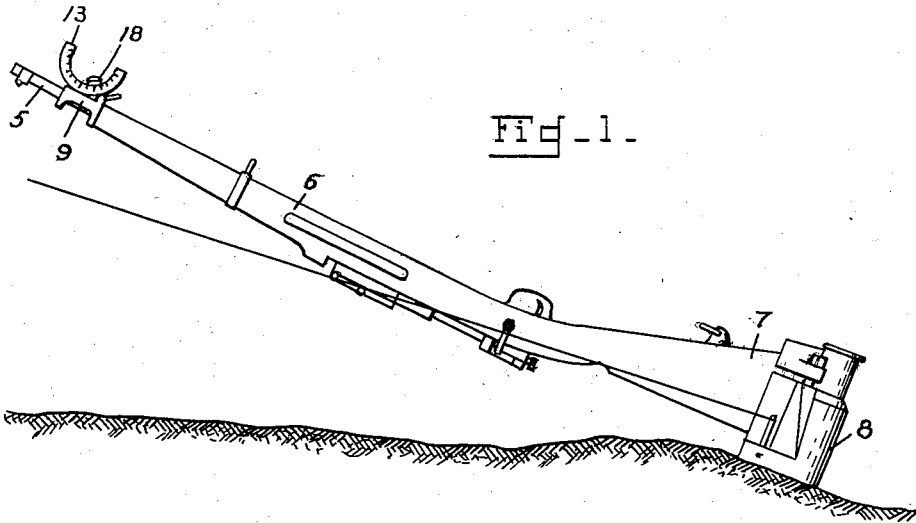


Fig. 2.

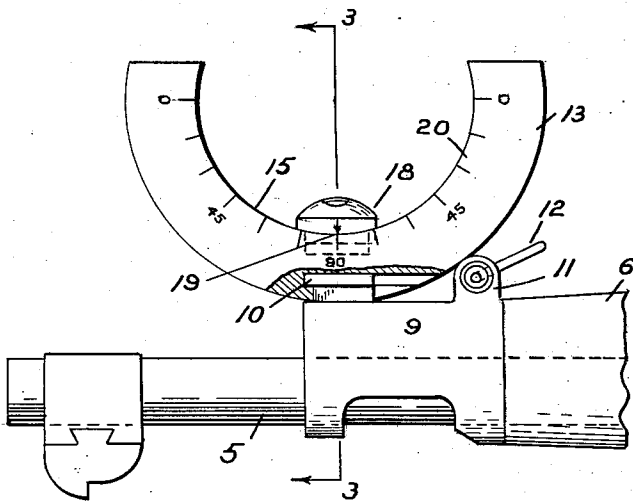
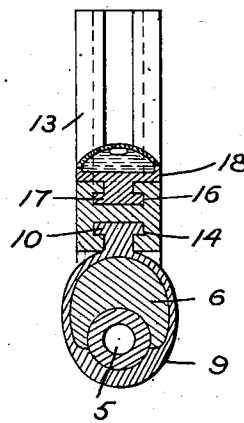


Fig. 3.



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CLINOMETER FOR A RIFLE

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2 Claims. (Cl. 33—207)

(Granted under the act of March 3, 1883, as
amended April 30, 1928; 370 O. G. 757)

The invention described herein may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

This invention relates to a clinometer for a rifle.

In firing a grenade from an attachment of a rifle the butt of the rifle is supported on the ground and the angle of firing is established by holding the rifle in an inclined position.

The purpose of this invention is to provide a clinometer which may be conveniently mounted on the bayonet lug of the rifle and which will serve to indicate the elevation or range setting of the rifle and also the cross-level or lateral inclination of the attachment on the butt of the rifle.

To these and other ends, the invention consists in the construction, arrangement and combination of elements described hereinafter and pointed out in the claims forming a part of this specification.

A practical embodiment of the invention is illustrated in the accompanying drawing, wherein:

Fig. 1 is a view in side elevation showing the application of the clinometer to a rifle.

Fig. 2 is an enlarged view in side elevation of the clinometer, and

Fig. 3 is a sectional view on the line 3—3 of Fig. 2.

Referring to the drawing by characters of reference there is shown a rifle 5 having attached to the butt 6 of the stock 7 a discharger 8 which is of the type shown in Patent No. 1,986,794 of January 8, 1935, and is adapted for firing grenades and pyrotechnic signals.

The upper band 9 of the gun stock 7 is provided

with a lug 10 for the purpose of mounting a bayonet, not shown, and also with spaced ears 11 for attachment of a stacking swivel 12.

The clinometer comprises a body 13 which is supported on the upper band 9 and has a T-slot 14 whereby it is mounted on the bayonet lug 10 when applied by a movement parallel to the gun.

The body has a semi-circular upper face 15 formed with a T-slot 16 for receiving the correspondingly shaped shoe 17 of a circular spirit level 18. A reference mark 19 on the spirit level is readable against a range or elevation scale 20 inscribed on the side of the body adjacent the edge of the face 15.

In operation, the spirit level is moved to the range or elevation desired and the rifle is grasped by its stock and moved into a position in which the bubble of the spirit level is centered. The axis of the discharger is now cross-leveled into a vertical plane and is inclined an amount which will cause the projectile to travel to the designated range.

I claim:

1. A clinometer comprising a body having a slot in its under face whereby it is mounted on the bayonet lug of a rifle and having a semi-circular upper face with a T-slot, a circular spirit level having a foot in the T-slot of the body, and an elevation scale on the body against which the spirit level is readable.

2. A clinometer comprising a body having a semi-circular upper face with a T-slot, a circular spirit level having a foot in the T-slot of the body, and an elevation scale on the body against which the spirit level is readable.

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