

Sept. 4, 1928.

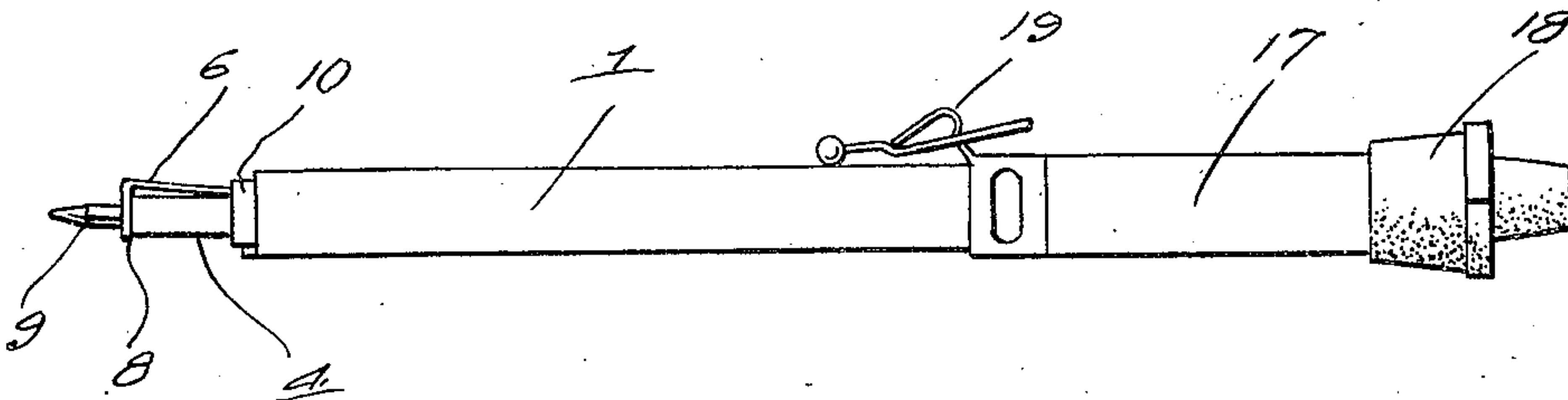
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G. J. RALL

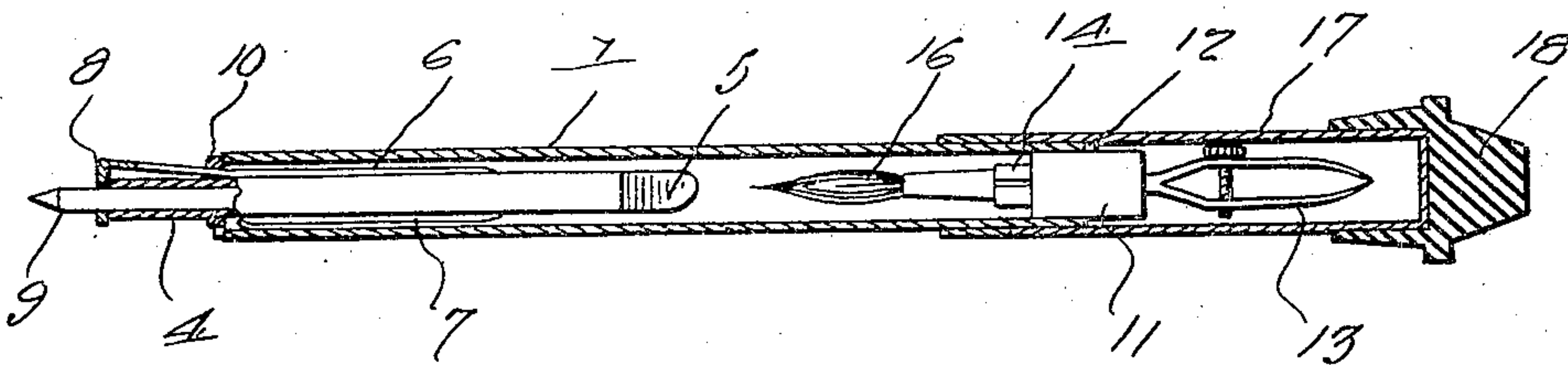
COMBINATION IMPLEMENT

Filed March 13, 1928

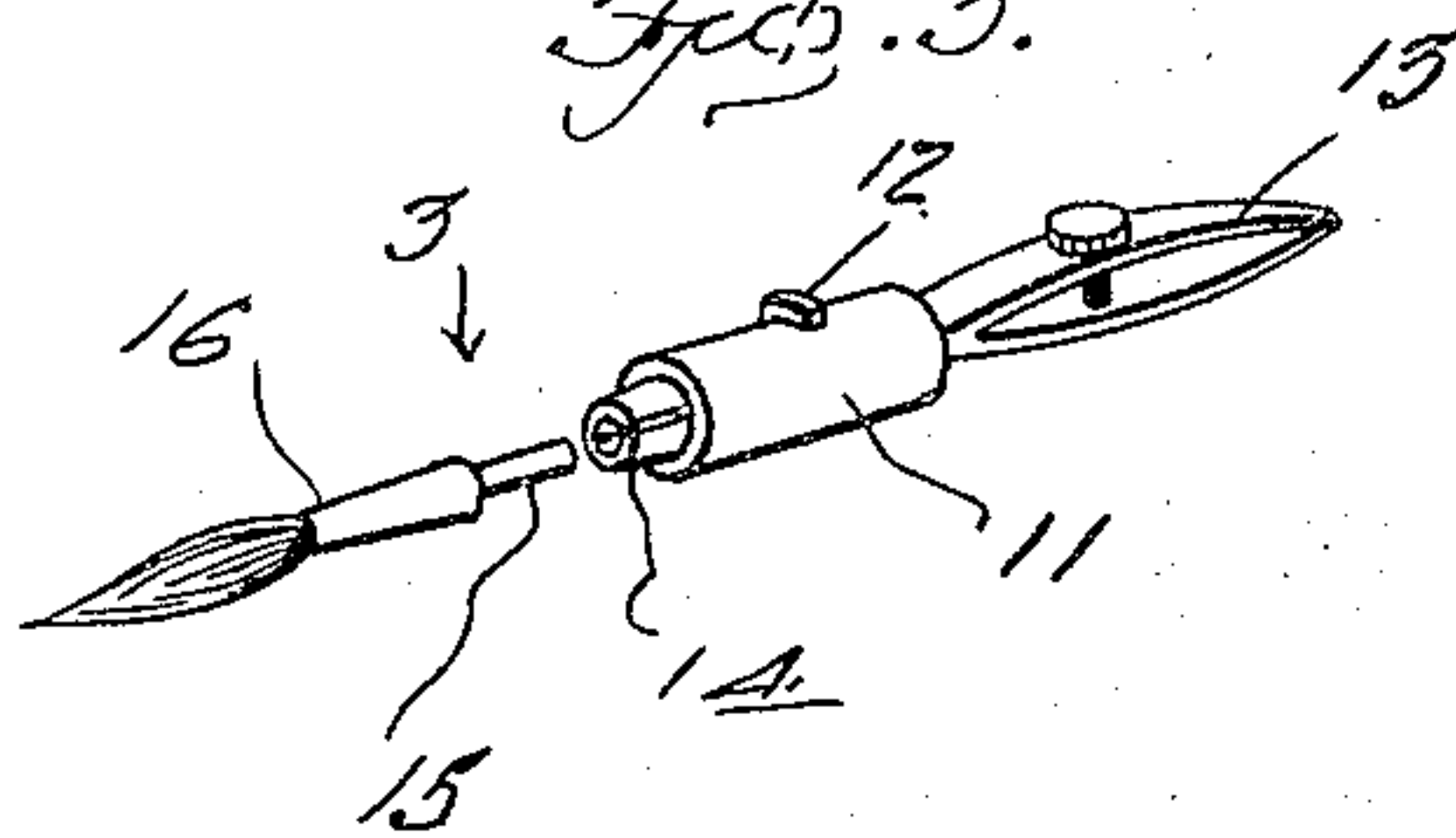
*Fig. 1.*



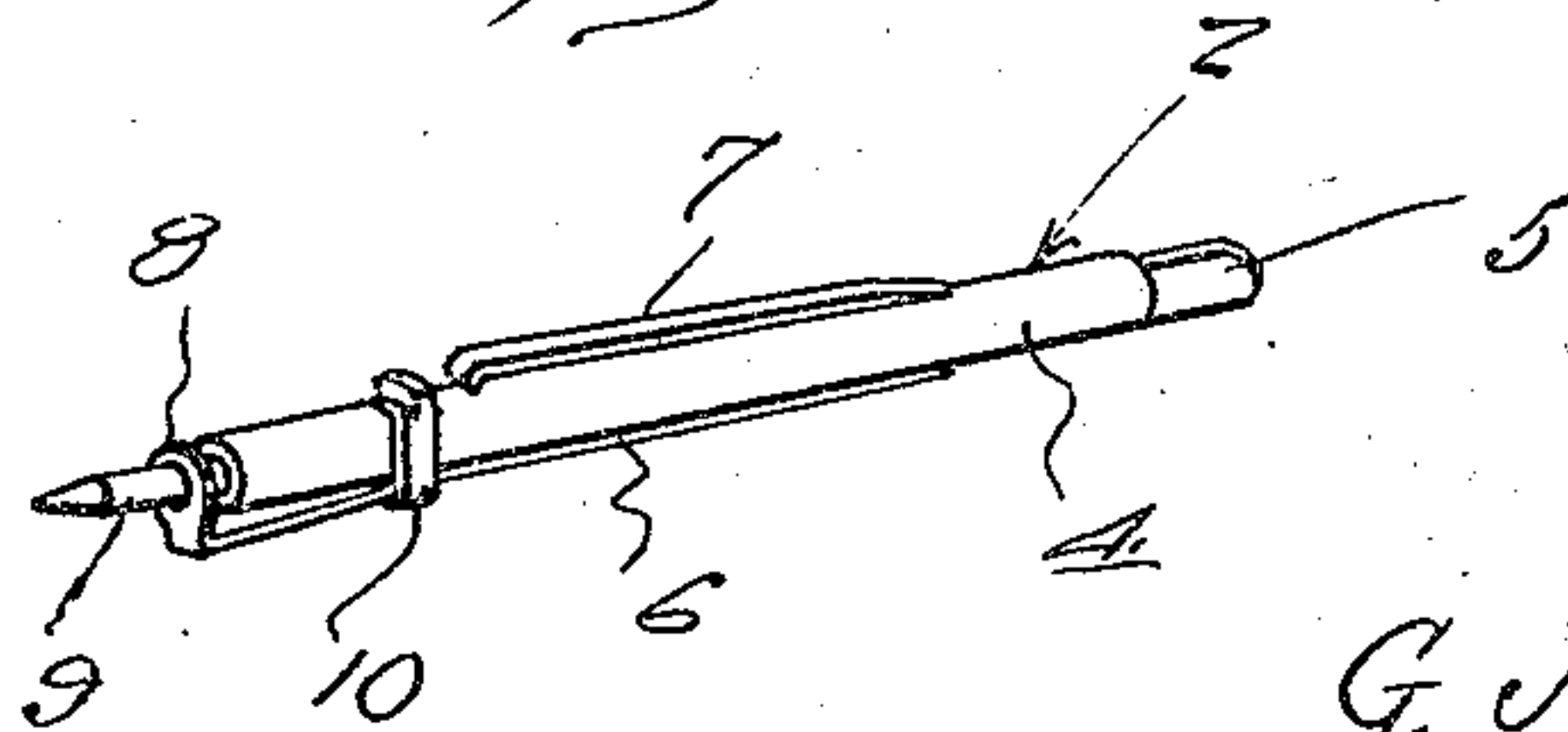
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



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## UNITED STATES PATENT OFFICE.

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## COMBINATION IMPLEMENT.

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The present invention relates to improvements in implements particularly used by draftsman and has for its principal object to provide a compound instrument that is simple in construction and the parts so arranged as to permit the use of the various implements whenever necessary.

One of the important objects of the present invention is to provide a compound instrument of the above mentioned character that includes an elongated barrel having independent units interchangeably fitted in the respective open ends of the barrel, a closure cap being removably associated with either end of the barrel.

A further object is to provide a compound instrument of the above mentioned character which is strong and durable and otherwise well adapted for the purposes for which it is designed.

Other objects of the invention will become apparent as the nature of the invention proceeds and when taken in connection with the accompanying drawing.

In the accompanying drawing, forming a part of this application and in which like numerals designate like parts throughout the several views:

Figure 1 is a side elevation of the compound instrument embodying my invention, the pencil being shown in position for use.

Figure 2 is a longitudinal sectional view through the instrument.

Figure 3 is a detail perspective view of one of the units including a ruling pen and a brush, the brush being shown detached from its holder, and

Figure 4 is a similar view of the other unit and includes a pencil and a knife blade.

In the drawing, wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates an elongated barrel, that is preferably formed of metal, the same being opened at its respective ends. Furthermore, this barrel is of substantially the same diameter throughout its entire length. Removably fitted in one end of the barrel 1 is the unit 2, the unit 3 being removably fitted in the opposite end of the barrel. The unit 2 includes a tubular shank 4, that is opened at one end, the other end of said shank being closed and having a knife blade 5 formed thereon and extending outwardly therefrom as clearly shown in Figures 2 and 4 of the drawings.

A pair of spring arms 6 and 7 respectively are secured at one end to the outer side of the shank 4, adjacent the closed end thereof, these spring arms being arranged at diametrically opposite points and extending forwardly along the shank. The spring arm 6 is of greater length than the complementary spring arm 7 and extends beyond the forward open end of the shank 4 and is formed with the laterally disposed eye portion 8 that is adapted to cooperate with the open end of the shank to receive the lead 9 and due to the resiliency of the spring arm 6, the same has a tendency to move outwardly with respect to the shank 4.

Thus the eye portion 8 provides a clutch for positively supporting the lead 9 in position for writing.

A band 10 extends around the shank 4 adjacent the open end thereof and encloses the spring arm 6 in the manner as clearly shown in the drawing. Furthermore, this band 10 abuts the adjacent end of the barrel 1, when the pencil portion of the unit 2 is in use, as clearly illustrated in Figure 2.

The spring arm 7 terminates inwardly of the band 10 and is adapted to frictionally engage with the inner wall of the barrel 1, whereby to hold the shanks 4 in a rigid manner in one end of the barrel.

It is readily obvious that by removing the unit 2 and inserting the pencil end of the unit in the barrel, the knife blade 5 may be exposed for use.

The other unit 3 that is removably fitted in the opposite end of the tubular barrel 1 comprises a sleeve 11 that is of such size as to snugly fit in the end of the barrel. This sleeve is formed at a point, intermediate its ends with the laterally disposed lugs 12 that provide stops for engagement with the outer edge of the barrel, in the manner as clearly shown in Figure 2. A draftsman's ruling pen 13 of any well known construction is carried by one end of this sleeve 11, while extending from the opposite end of the sleeve is the socket 14 for removably receiving the shank 15 of the brush element 16.

When the ruling pen is exposed with respect to the barrel, the brush is confined in the barrel, and vice versa. A tube like cap 17 is slidably and removably fitted over either end of the barrel. A rubber eraser 18 is carried by the outer end of the cap.

A spring clip 19 of any well known con-



struction is also carried by the barrel, whereby the instrument can be held in position in the pocket against accidental displacement therefrom.

5 The cap 17 may be disposed on either end of the barrel depending upon which unit is to be used, and furthermore, each unit includes two independent implements that can be readily placed in position for use, when-  
10 ever necessary without the loss of any considerable length of time or labor.

A compound instrument of the above mentioned character will enable several implements to be incorporated in a single structure, so that the same will at all times be  
15 at hand for use whenever necessary, and the parts are so arranged as to permit any one of the implements to be brought into use.

A compound instrument of the above mentioned character will be compact, and yet of such construction as to enable the same to be properly and easily handled for use, in an efficient manner. Also, a compound instrument of this character can be manufactured  
20 at a very low cost.

While I have shown the preferred embodiment of my invention, it is to be understood that minor changes in the size, shape, and arrangement of parts may be resorted to,  
30 without departing from the spirit of the invention and the scope of the appended claims.

Having thus described my invention, what I claim as new is:

35 1. In a compound instrument of the class described, an elongated barrel, the same being open at one end, a shank open at one

end and adapted for disposition in the open end of the barrel, a pair of spring arms secured at one end to the shank adjacent the  
40 other end thereof, said spring arms engaging the barrel to frictionally hold the shank therein, a lead for disposition in the open end of the shank, one of the spring arms projecting beyond the open end of the shank,  
45 a laterally disposed eye portion formed on the outer end of said last mentioned spring arm for engagement with the projecting end of the lead to hold the same in clutched  
50 manner.

2. In a compound instrument of the class described, an elongated barrel, the same being open at one end, a shank open at one end and adapted for disposition in the open  
55 end of the barrel, a pair of spring arms secured at one end to the shank adjacent the other end thereof, said spring arms engaging the barrel to frictionally hold the shank therein, a lead for disposition in the open  
60 end of the shank, one of the spring arms projecting beyond the open end of the shank, a laterally disposed eye portion formed on the outer end of said last mentioned spring arm for engagement with the projecting end  
65 of the lead to hold the same in a clutched manner, and a band encircling the shank adjacent the open end thereof for engagement with the adjacent end of the barrel, said band extending around the longer of the spring  
70 arms.

In testimony whereof I affix my signature.

GLEN J. RALL.