March 19, 1929. E. I. MacEACHRON 1,705,871

TAPE AND PLUMB BOB TARGET

Filed April 5, 1928

Fig. 1.

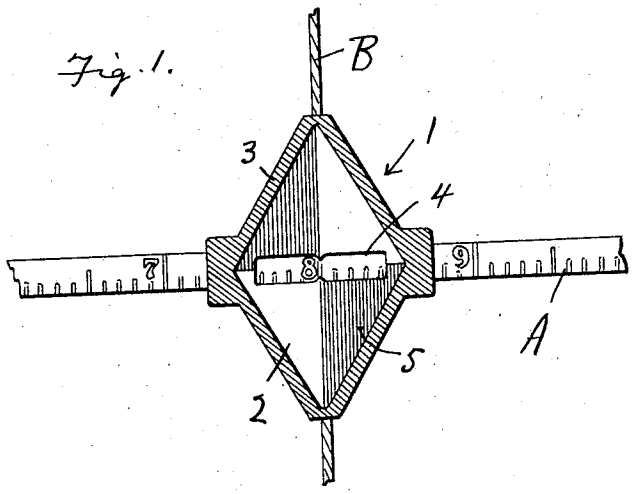


Fig. 2.

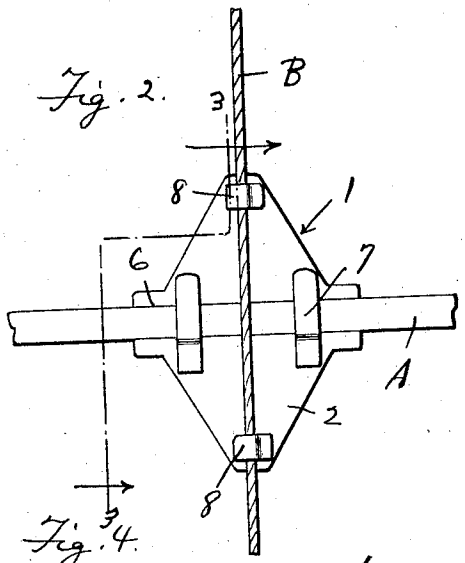


Fig. 3.

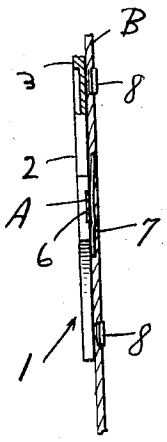
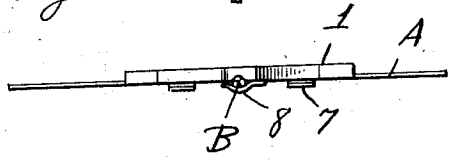


Fig. 4.



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UNITED STATES PATENT OFFICE.

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TAPE AND PLUMB-BOB TARGET.

Application filed April 5, 1928. Serial No. 267,651.

The present invention relates to improvements in targets to be used by engineers or surveyors and has for its principal object to provide a device that can be readily and easily attached on the steel tape and a plumb bob string.

One of the important objects of the present invention is to provide a target of the above mentioned character which is formed with a sight opening through which the graduations on the tape line can be seen as well as providing a means for enabling the surveyor to take long sights without the inconvenience of carrying a range pole or sight rod.

A still further object is to provide a target of the above mentioned character which will at all times be positive and efficient in carrying out the purposes for which it is designed, the same being further simple in construction, inexpensive and strong and durable.

Other objects and advantages will become apparent during the course of the following description.

In the accompanying drawing, forming a part of this specification, and in which like numerals indicate like parts throughout the same:—

Figure 1 is a front elevation of a target embodying my invention showing its relation with respect to a measuring tape and a plumb bob string.

Figure 2 is a rear elevation thereof for more particularly disclosing the securing means for the tape and the string.

Figure 3 is a sectional view taken approximately on the line 3—3 of Figure 2 looking in the direction of the arrows, and

Figure 4 is a top plan view.

In the drawing wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates generally my improved target the same comprising a body portion 2 that is constructed of any suitable material such as metal, aluminum, celluloid and the like. In the present instance, the body is of substantially diamond formation or shape although it is to be understood that I do not wish to limit myself to the particular shape of the body. The body may be provided with a flanged border as indicated at 3 in Figure 3.

This body 2 is formed with a central transversely disposed sight opening 4 and as is clearly shown in Figure 1, the front face of the body is formed with the diagonally opposed colored portion 5 while the other diagonally opposed spaces are of a contrasting color for a purpose well known in the art.

The plate-like body is formed in its rear face with the transversely extending channel 6 for receiving a steel tape A whereby a guide is provided for the slidable tape and the graduations on the tape are visible through the sight opening 4.

The tape is held in position in this channel or guide groove 6 by means of the spring clips 7 that extend transversely across the channel or guide groove, each of these spring clips being secured at one end to the plate-like body by any appropriate fastening means, while the free end is bent to form a finger engaging portion whereby said spring clips may be moved outwardly away from the body to facilitate the ready and easy insertion or removal of the tape with respect to the guide channel. A pair of these spring clips is provided as clearly shown in Figure 2.

The target is also adapted for attachment upon the plumb bob string B and to this end, the rear face of the plate-like body is formed at its upper and lower end portions with longitudinally extending grooves to accommodate the plumb bob string and suitable spring clips 8 which are secured at one end to the rear face of the plate-like body extend across the plumb bob string B and the respective grooves at the upper and lower ends of the body to retain the string in position and the free ends of the spring clips 8 are bent to form finger engaging portions.

In surveying a street or the like, it is customary to take all measurements from the central line of the street in order to locate all of the buildings, fences, poles and the like and the most accurate way to obtain these measurements is by holding the tape to the object to be located and swinging it until a certain point on the tape is the outer edge of an arc and the line of the transit is at a tangent therewith.

The tape holder holds a pencil on the tape and shifts it along the tape until it coincides with the line of transit. This is what is called a 90° offset. My improved target can be readily and easily snapped on the tape and is capable of slidable movement so that an accurate reading may be obtained and

furthermore the target can be readily and easily seen at a distant point by the transit man.

By attaching the plumb bob string on the target, said target can be used in a positive manner for the purposes well known in the art.

The simplicity of my improved target renders the same inexpensive in its manufacture and yet strong and durable and at all times positive and efficient in carrying out the purposes for which it is designed.

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

What I claim is:—

As a new article of manufacture, a target comprising a plate-like body formed with a central sight opening, the rear face of the body being formed with tape line and plumb bob string receiving grooves respectively disposed at right angles with respect to each other, and spring clips secured on the rear face of the plate-like body for disposition across the respective grooves.

In testimony whereof I affix my signature.

EDWARD I. MacEACHRON.