S. STEVENS.

TESTING DEVICE.

APPLICATION FILED SEPT. 7, 1920.

1,376,655.

Patented May 3, 1921.

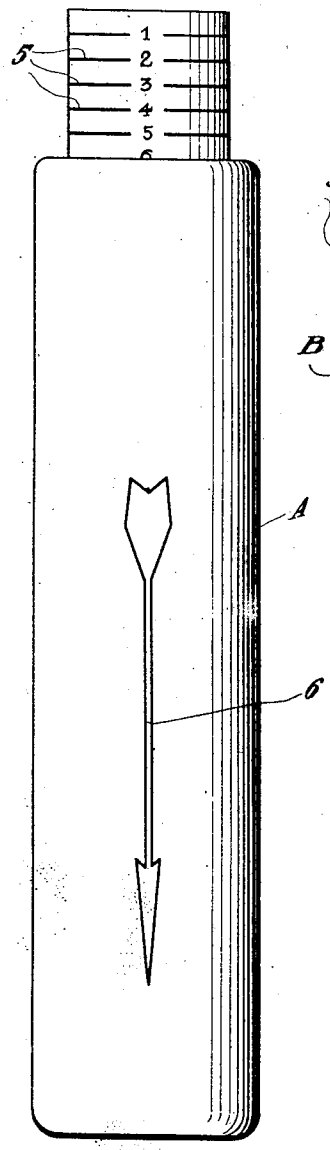


Fig. 1.

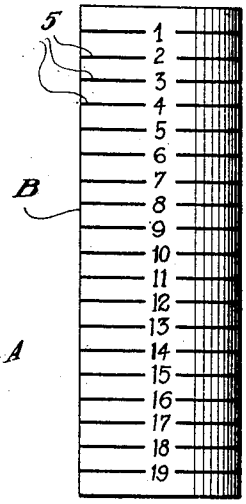


Fig. 2.

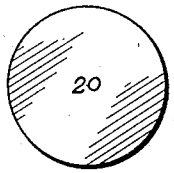


Fig. 3.

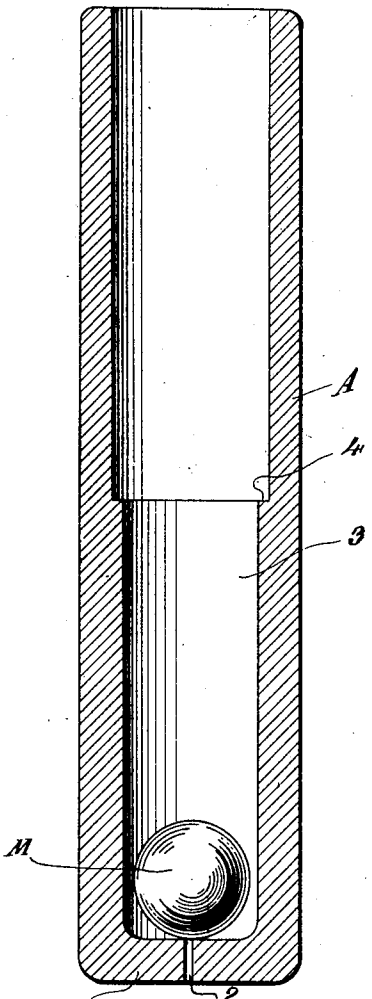


Fig. 4.

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UNITED STATES PATENT OFFICE.

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TESTING DEVICE.

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To all whom it may concern:

Be it known that I, SIDNEY STEVENS, a citizen of the United States, residing at Millinocket, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Testing Devices, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in testing devices, and it is primarily an object of the invention to provide a novel and improved device of this general character which may be employed to advantage in determining how rapidly an impulse from the brain center of an individual is fully translated into muscular action.

It is also an object of the invention to provide a device of this general character which may be employed as an amusement device and particularly in a contest to determine the quickness of motion.

Another object of the invention is to provide a device of this general character embodying two telescopically related members normally held by friction against relative movement and wherein one of the members is provided with a chamber in which is loosely arranged a weighted member, which member, upon movement of the device in one direction, is adapted to impose impact upon the inserted member, resulting in movement of said inserted member relative to the outer member, the extent of movement of the inserted member determining the degree of quickness of the motion.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved testing device whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a view in elevation of a testing device constructed in accordance with an embodiment of my invention with the inserted member partly extended.

Fig. 2 is a view in elevation of the inserted member as herein embodied.

Fig. 3 is a view in bottom plan of the device as illustrated in Fig. 2, and

Fig. 4 is a longitudinal sectional view taken through the outer or tubular member with the weighted ball shown in elevation.

As disclosed in the accompanying drawings, A denotes an elongated tubular member having one end closed, as at 1, with said end wall provided therethrough with a restricted opening 2 affording communication between the interior of the member A and the atmosphere.

The inner portion of the bore 3 of the member A is of a diameter slightly less than the outer portion of said bore, whereby an internal shoulder 4 is provided.

B denotes an elongated solid member adapted to be snugly inserted within the member A through the open end thereof and said member B is of such length to have the outer end thereof substantially flush with the open end of the member A when the inserted end of the member B is in contact with the internal shoulder 4.

The member B is provided with a plurality of equidistantly spaced graduations 5 herein disclosed as numbered consecutively from "1" to "19", with the end graduations 5 spaced from the adjacent ends of the member B equal to the space between adjacent graduations 5. The inner end of the member B is numbered "20", whereby the exact number of spaces as afforded by the graduations 5 is clearly indicated.

Loosely fitting within the chamber of the member A and particularly as afforded by the reduced portion of the bore 3 thereof is a weighted member M preferably spherical and of iron or other material possessing the requisite weight.

The periphery of the member A has produced thereon an index or arrow 6 extending longitudinally of the member A and pointing toward the closed end thereof and which serves to indicate the direction in which the device is to be moved when in use.

In practice, the member B is snugly engaged within the member A with the outer end of the member B flush with the top or open end of the member A. By rapidly passing the device downward or in the direction indicated by arrow 6, the member M being inert will be overtaken by the member

B and the resultant impact between the member M and the lower end of the member B will force the member B outwardly of the member A, such distance being wholly dependent upon the speed of the device together with the length of the chamber below the shoulder 4 less the diameter of the member M.

Of course, the degree registered or indicated by the graduations 5 carried by the member B will depend upon the tightness of fit of the member B within the member A and the consequent frictional resistance offered to the movement of the member B relative to the member A.

With my device, strength is not a factor but the faculty of calling the speed of the individual instantly into action or more particularly the quickness of the motion.

From the foregoing description it is thought to be obvious that a testing device constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

A testing device of the class described comprising an elongated tubular member having one end closed, a second member partially snugly fitting within the bore of the tubular member and insertible therein through the open end of the tubular member, said second named member being of a length less than the tubular member whereby a chamber is provided inwardly of the second named member when applied, and a weighted member loosely arranged within said chamber, said tubular member being provided with an internal shoulder to limit the extent of insertion of the second named member within the tubular member.

In testimony whereof I hereunto affix my signature.

SIDNEY STEVENS.