A. CRONWELL.

MINING MEASURE.

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975,213.

Patented Nov. 8, 1910.

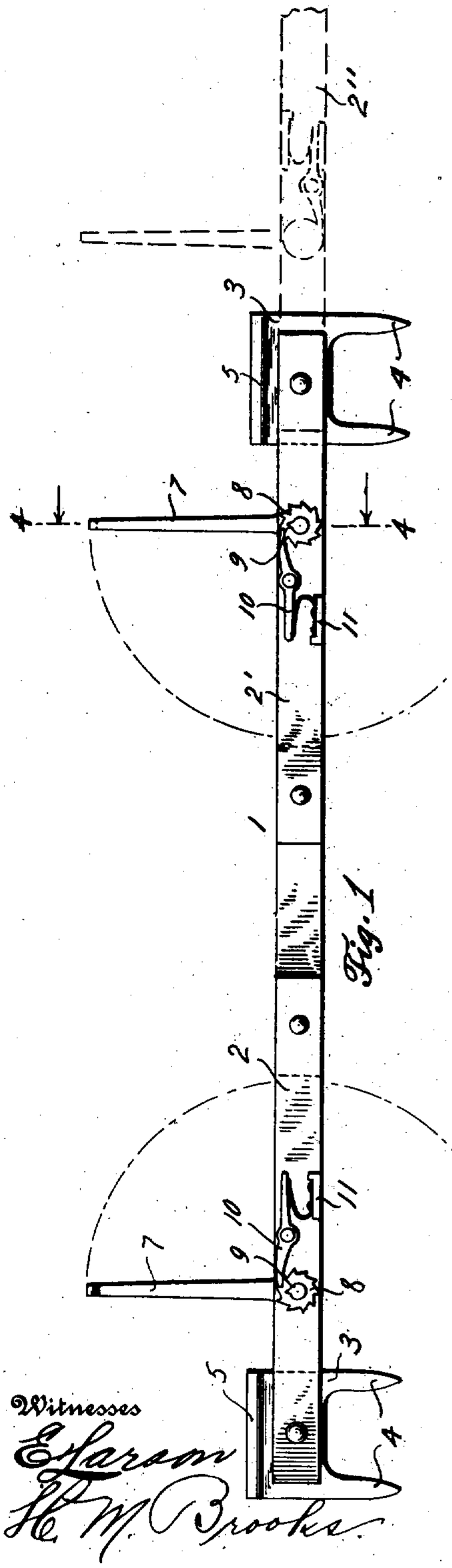

Fig. 1

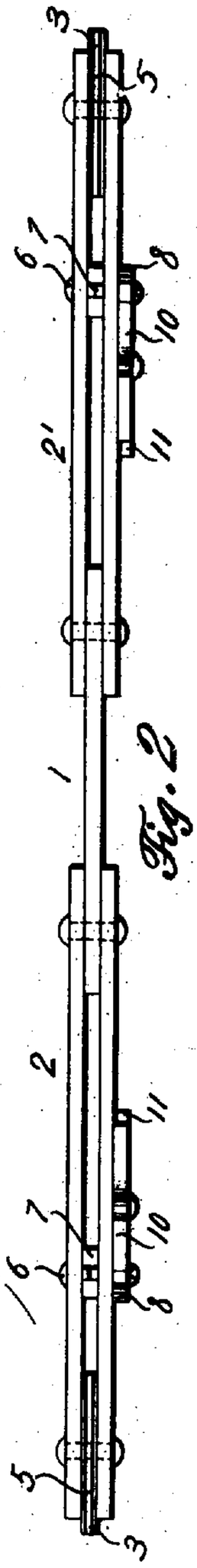

Fig. 2

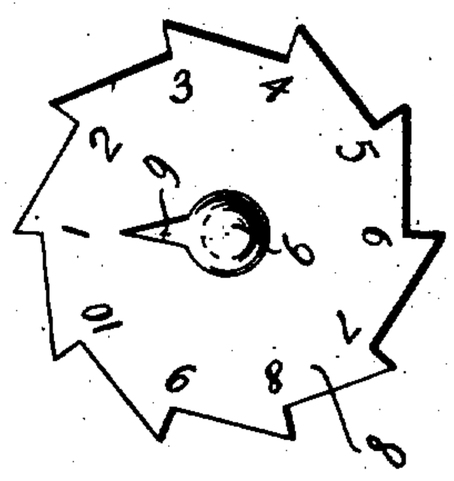

Fig. 6

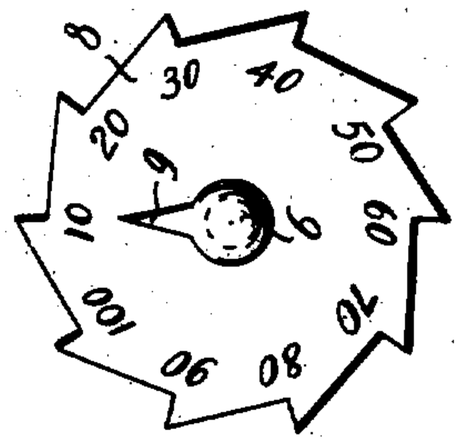

Fig. 5

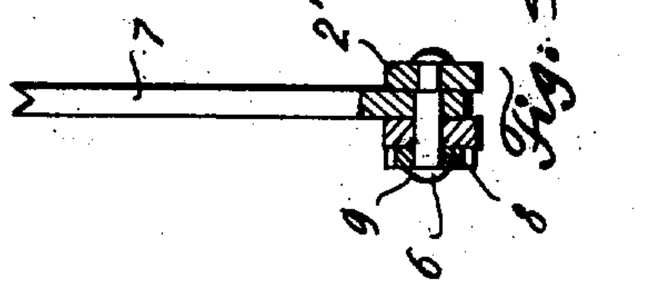

Fig. 4

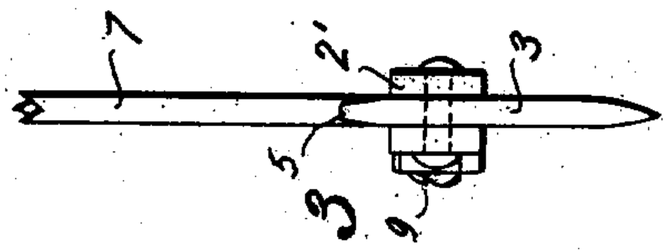

Fig. 3

Witnesses

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UNITED STATES PATENT OFFICE.

ANTHONY CRONWELL, OF STERLING RUN, PENNSYLVANIA.

MINING-MEASURE.

975,213. Specification of Letters Patent. Patented Nov. 8, 1910.

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To all whom it may concern:

Be it known that I, ANTHONY CRONWELL, a subject of the King of Sweden, residing at Sterling Run, in the county of Cameron and State of Pennsylvania, have invented certain new and useful Improvements in Mining-Measures, of which the following is a specification.

This invention relates to measures and particularly to those adapted for use in mines.

This invention has for its object to provide a measure of the above character which may be operated by a single person, thus doing away with the unnecessary expense of another person as is now required with those instruments now used.

It also has in view the provision of a measure provided with sights by which the operator may see to travel in a straight path, thus preventing many accidents caused by excavating in crooked courses.

With the above and other objects in view, this invention consists of the construction, combination and arrangement of parts all as hereinafter more fully described, claimed and illustrated in the accompanying drawings, wherein:

Figure 1 is a side elevation of the present invention; Fig. 2 is a top plan view thereof; Fig. 3 is an end elevation; Fig. 4 is a cross section taken along line 4—4 of Fig. 1; Figs. 5 and 6 are dials used in connection with the invention.

Referring more particularly to the drawings, 1 indicates a body comprising pivoted end and intermediate sections the end sections 2 and 2′ being composed of spaced plates. At the outer extremities of the end sections are rotatably mounted supporting members 3 by which the device is supported, each of said members comprising a plurality of feet 4 on one edge, and on the opposite edge, the beveled portion 5, said latter portion permitting free movement between the plates of the sections. Pivotally mounted on the shaft 6 and between the plates of each section is the sight 7 for sighting in a straight line, each sight being so mounted as to pass between the plates as illustrated in dotted arcs in Fig. 1. Rotatably mounted adjacent one extremity of the shaft 6 is a ratchet dial 8, said dial having numerals on its outer face. The said extremity of the shaft 6 may have, if desired, the indicator 9. The dial 8 is retained in any desired position by means of a spring actuated pawl 10, the spring of said pawl being secured to an outstanding lug 11 projecting from one of the plates of the end section.

In operation, the supporting members are forced into the ground by any tool being applied to the beveled portion of said members after the device has been sighted on some stationary point. After sufficient excavations have been made, the device may be turned over, using the supporting member nearest the excavation as a pivot, thus bringing the device in a position as shown at 2″ in the dotted lines in Fig. 1, the sights being passed between the plates to the opposite side, or now top side. The device is now again sighted on its stationary point after which the other supporting member may be driven into the ground. At each measure or length of the device, the dial may be turned one notch, thus keeping a record of the number of roddings made.

The device may be folded into a compact form, due to its pivotally connected sections, thus making the device very handy.

Having thus described the invention, what is claimed as new is:

1. In a measuring instrument, the combination with a body comprising pivotally connected sections, of a plurality of supporting members rotatably mounted on said body, said members having a plurality of feet and a plurality of sights pivotally mounted in said body, for the purposes herein set forth.

2. A measuring instrument comprising a section, supporting members connected with opposite ends of said section to position the same on the ground, said supporting members being pivotally connected to the section whereby the latter may be thrown bodily over a front supporting member to bring the rear supporting member in advance thereof and accomplish a progressive movement of the measure.

3. A measuring instrument comprising a measuring section, supporting members at its opposite ends, said measuring section being movable with a rearmost supporting member to advance the measure progressively by positioning such rear supporting member in advance of the front supporting member.

4. A measuring instrument comprising pivoted sections and supporting members at its opposite ends, said sections being

movable with a rearmost supporting member to advance the measure progressively by positioning such rear supporting members in advance of the front supporting member, and sights carried by said sections adapted to be used after each measurement as hereinbefore set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ANTHONY CRONWELL.

Witnesses:
AUGUST NELSON,
M. M. LARRABEE.