Dec. 7, 1926.

J. S. BATTLE

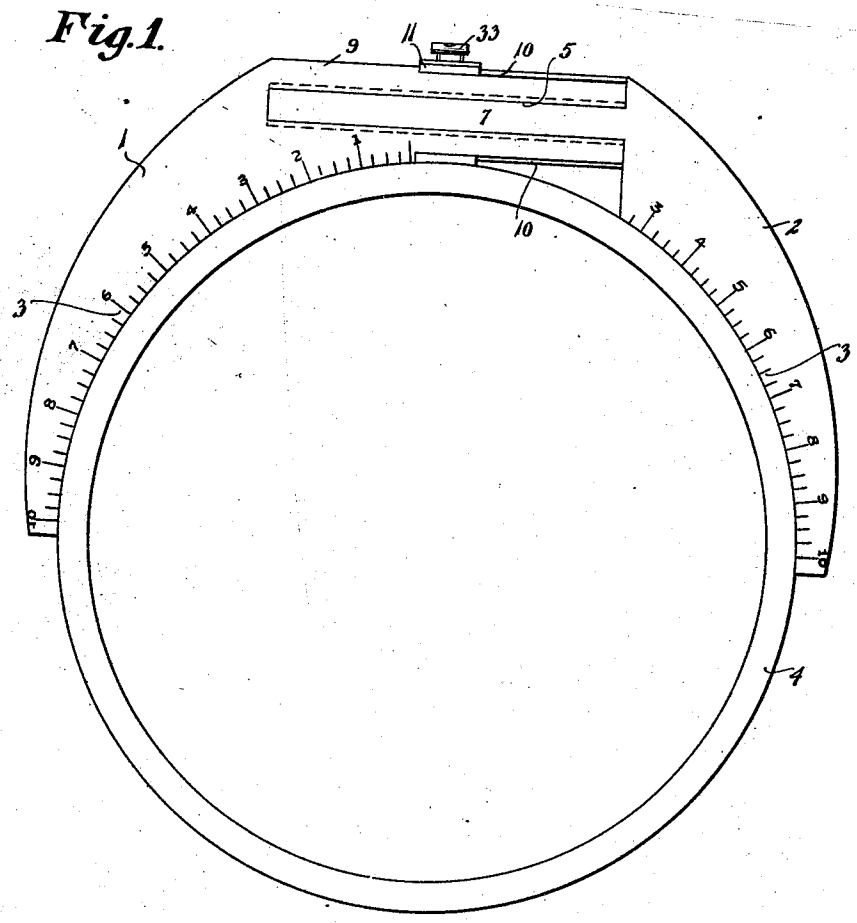
1,610,193

COMBINATION PIPE MARKER AND LEVEL

Filed Dec. 29, 1924

2 Sheets-Sheet 1

Fig. 1.



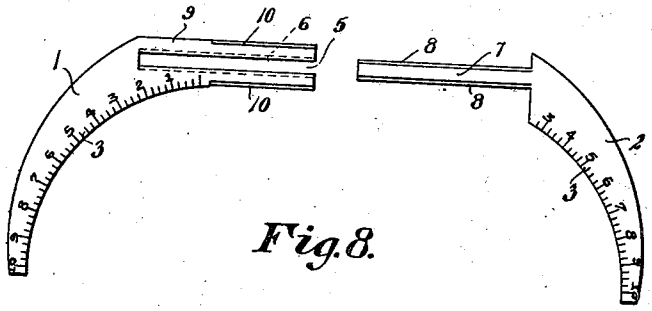


Fig. 8.

WITNESS:

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2 Sheets-Sheet 2

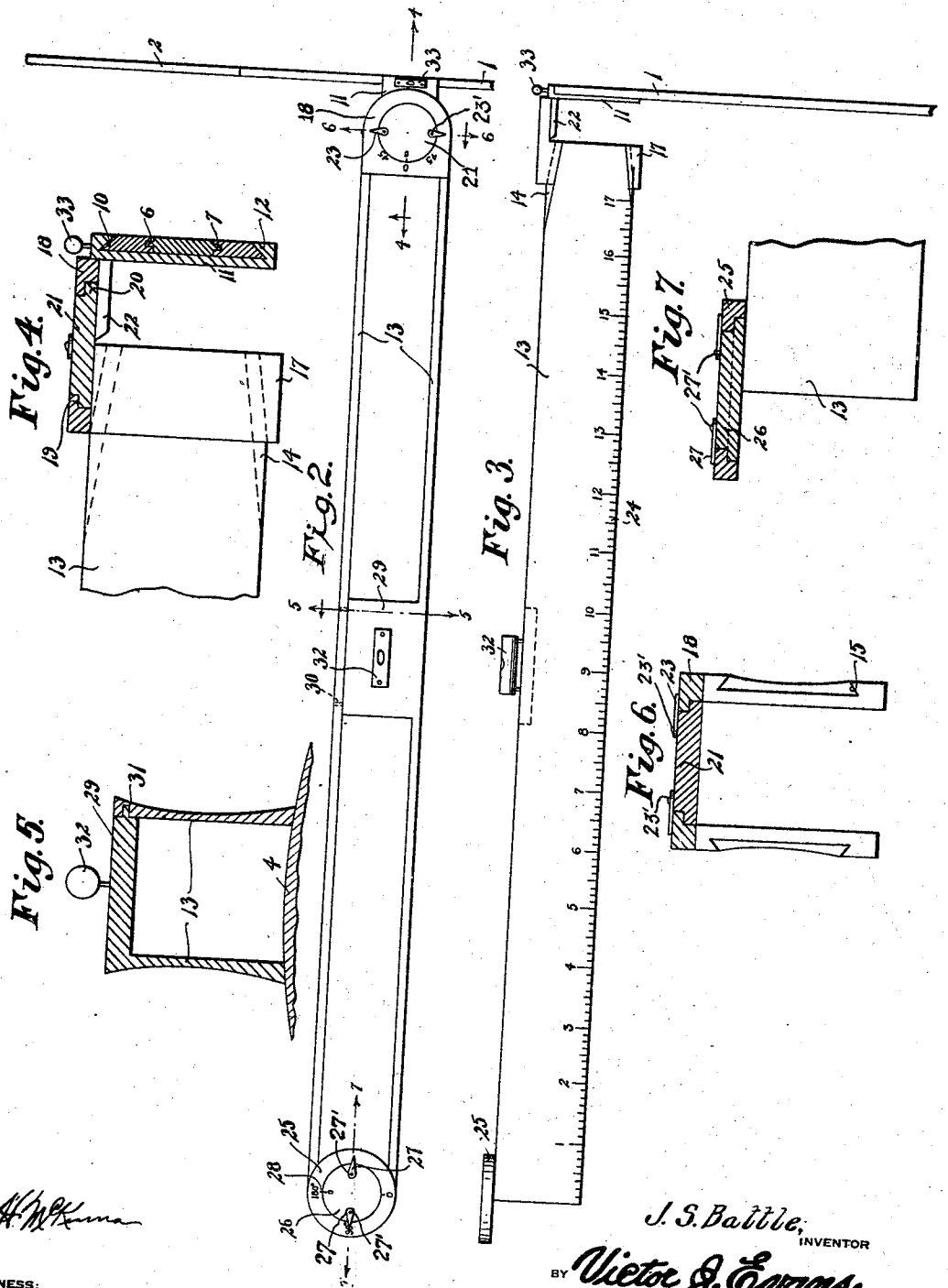


Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

Fig. 6.

Fig. 7.

WITNESS:

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Patented Dec. 7, 1926. 1,610,193

UNITED STATES PATENT OFFICE.

JOHN SPICER BATTLE, OF TIPTON, OKLAHOMA.

COMBINATION PIPE MARKER AND LEVEL.

Application filed December 29, 1924. Serial No. 758,762.

This invention relates to new and useful improvements in pipe markers and levels and more particularly to a device of this character which is especially adapted for use in measuring the lengths of pipes of predetermined diameters to facilitate cutting the same and further for use in facilitating cutting of pipe at an acute angle and for determining the level position of the pipe.

Another object of my invention is the provision of an article of the above character wherein the several parts are combined in a single device, so constructed and arranged that they may be quickly and readily separated one from the other or fitted together for combined use.

With the above and other objects in view, the invention consists in the novel features of construction, the combination and arrangement of parts hereinafter more fully set forth, pointed out in the claims and shown in the accompanying drawings, in which:

Fig. 1 is a front elevation illustrating the same applied to a pipe,

Fig. 2 is a top plan view,

Fig. 3 is a side elevation,

Fig. 4 is a detail section on the line 4—4 of Fig. 2,

Fig. 5 is a detail transverse section on the line 5—5 of Fig. 2,

Fig. 6 is a detail transverse section on the line 6—6 of Fig. 2,

Fig. 7 is a detail section on the line 7—7 of Fig. 2, and

Fig. 8 is a detail front elevation illustrating the pipe embracing members in a separated position.

My improved device comprises two arcuate members 1 and 2, the inner edges of which are provided with a plurality of graduations 3, which when the device is arranged in an operative position as shown in Figure 1 are disposed next to the exterior of a pipe 4. The side member 1 has its body portion provided with a longitudinal slot 5, the walls of which have longitudinal grooves 6, and fitted within the slot 5 is an arm 7 carried by the side member 2 and provided with tongues 8 which engage within the grooves 6 to form a tongue and groove connection between the two parts 1 and 2 whereby they may be quickly and readily adjusted to accommodate the device to the pipe to be measured and cut.

The upper and lower edges of the transverse body portion 9 of the side member 1 are provided with tapered edges 10 as is clearly illustrated in Figure 4 and embracing the body member 9 is a head portion 11 the walls of which are undercut as shown at 12 to form tapering grooves for receiving the tapered edges 10 of the body 9 whereby the head member 11 may be quickly and readily moved into position upon the body 9, the side member 2 being then placed in position for retaining the head 11 upon the body 9.

Attached to the head member 11 for lateral swinging movement with respect to the same are spaced parallel arms 13, the forward ends of which are provided with tapering portions 14 adapted to be fitted into the recesses 15 formed in the side portions 17 of the annulus 18. The annulus 18 has a groove 19 in its lower face in which is fitted the annular rim 20 of a disc 21. This disc 21 is carried by a lateral arm 22 formed on the head 11. The disc 21 is placed in position within the annulus 18 and the movable indicators 23 are then arranged so as to extend upon adjacent portions of the annulus 18 as shown in Figure 2 for supporting the disc within the annulus, the indicating members 23, pivotally supported as at 23′ by the disc 21, are also being used when the arms 13 are moved at various angles with respect to the arcuate members 1 and 2 for indicating the various degrees to which the arms 13 are positioned.

It will be apparent from this construction that the spaced arms 13 may be quickly and readily connected to the head 11 and adapted to rest upon the upper edge of a pipe whereby various distances along the pipe may be readily indicated thru the medium of the graduations 24 which are provided for along the lower edges of the arms 13 as shown in Figure 3.

The arms 13 support at their ends opposite the head 11 an annulus 25 and a disc 26 which are fitted together in the same manner as the annulus 18 and the disc 21, the indicating members 27 pivotally to the disc 26 as at 27′ supporting the disc 26 within the annulus 25 in such a position that they may be readily moved toward the center of the disc for detaching the disc from the annulus. It will be apparent that in this rear construction that one of the arms 13 carry the disc while the other arm carries the annulus and the various degrees

indicated at 28 are used for determining the various angles of pipes when the arms 13 are detached from the head and used as a protractor.

Formed integral with one of the arms 13 and extending laterally therefrom is a plate 29 having spaced pins 30 at its outer edge which are adapted to engage within suitable openings 31 in the opposite arm when the two arms are arranged in spaced parallel relation as shown in Figure 2. These pins 30 serve, when the arms 13 are positioned in parallel relation with respect to each other, to support the plate 29 in substantially a level horizontal plane. This plate 29 supports a level 32 which is used for leveling the position of various pipes.

Attention is also directed to the fact that a level member 33 is carried by the head 11 and is to determine the position of the members 1 and 2 when applied to the pipe 4. It will be apparent from the foregoing construction that pipes of various sizes may be quickly and readily marked for cutting either transversely of the pipe or at various angles with respect to the longitudinal center of the pipe and the device may be readily used as a protractor for ascertaining the various angles of pipes as well as positioning the pipes on a level if so desirel.

While I have shown and described the preferred embodiment of my invention, it will be understood that various changes and alterations may be made without departing from the spirit of the invention or the scope of the appended claims.

Having thus described my invention, what I claim is:

1. An instrument of the class described including arcuate side members, means forming end to end slidable connection between the members, a head member carried by one of the arcuate members adjacent its connected end, spaced parallel arms, means providing a connection between corresponding end portions of the arms and the head, and means providing a connection between the opposite corresponding end portions of the arms.

2. An instrument of the class described incluing arcuate members having graduations formed upon their inner edges, means forming end to end connection between said members, a head member, means providing a connection between one of the arcuate members at its connected end and the head member, a disc carried by the head member, spaced parallel arms, means providing detachable connection between corresponding end portions of the arms and the disc, and means providing detachable connection between the opposite corresponding end portions of the arms.

3. An instrument of the class described including arcuate members, a tongue and groove connection between the arcuate members, a head member carried by one of the arcuate members, a disc carried by the head member, an annulus supported by the disc and having spaced side extensions formed thereon, spaced parallel arms having corresponding end portions slidably connected with the side extensions, and means providing a connection between opposite corresponding end portions of the arms.

4. An instrument of the class described including arcuate side members, means forming end to end slidable connection between said members, a head member supported by the members, a disc carried by the head member, spaced parallel arms, means providing detachable connection between corresponding end portions of the arms and the head member, and means providing detachable connection between the opposite corresponding end portions of the arms.

5. An instrument of the class described including arcuate members, a tongue and groove connection between the arcuate members, a head slidably received by one of the arcuate members, an annulus, a disc carried by the head and fitting into said annulus, extensions formed on said annulus, parallel arms having corresponding end portions slidably received by the extensions, an annulus formed on the opposite end of one of the arms, a disc formed on the opposite end of the other of the arms and fitting into said annulus, and indicating fingers pivotally supported by said discs for supporting said discs in operative position with respect to their respective annuli.

In testimony whereof I affix my signature.

JOHN SPICER BATTLE.