G. S. BRICKER.

TROWEL.

APPLICATION FILED SEPT. 21, 1912.

1,067,301. Patented July 15, 1913.

Fig. 1

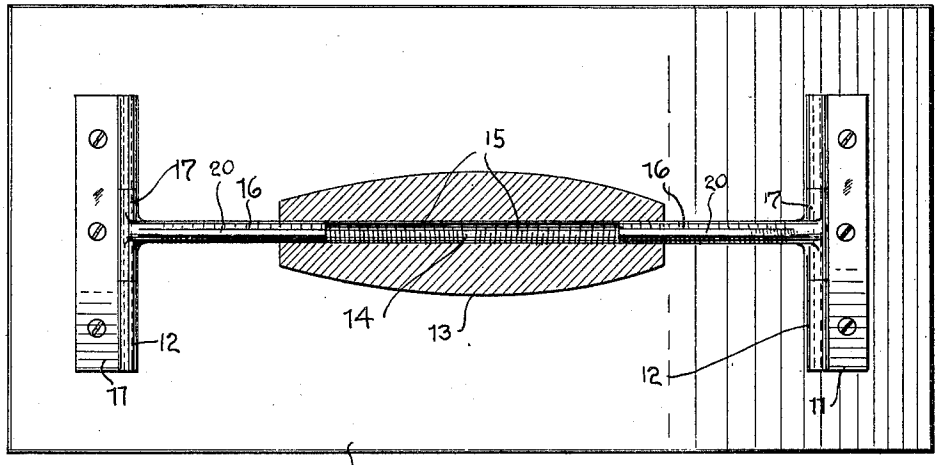


Fig. 2

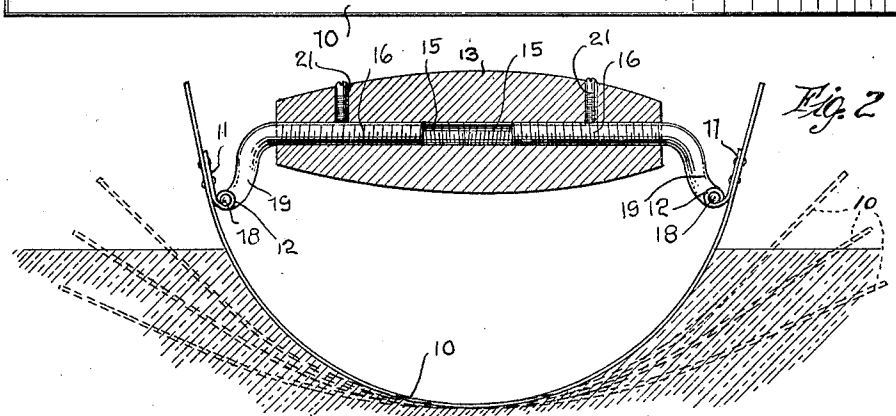


Fig. 3

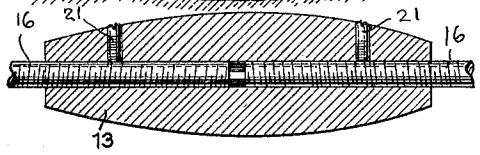


Fig. 5

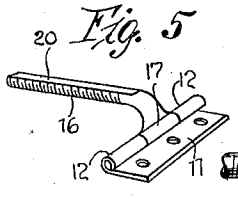
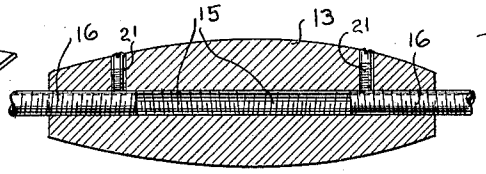


Fig. 4



WITNESSES

Robert M. Sutphen

L. N. Gillis

INVENTOR

George S. Bricker

By E. G. Crooman. His *Attorney*

UNITED STATES PATENT OFFICE.

GEORGE S. BRICKER, OF NEWVILLE, PENNSYLVANIA.

TROWEL.

1,067,301. Specification of Letters Patent. Patented July 15, 1913.

Application filed September 21, 1912. Serial No. 721,574.

To all whom it may concern:

Be it known that I, GEORGE S. BRICKER, citizen of the United States, residing at Newville, in the county of Cumberland and State of Pennsylvania, have invented certain new and useful Improvements in Trowels, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to trowels and has special reference to a trowel of flexible type.

The principal object of the invention is to improve and simplify the general construction of devices of this character.

Another object of this invention is to provide an improved bending mechanism for such trowels.

With these and other objects in view this invention consists in certain novel combinations, constructions, and arrangements of parts as will be hereinafter fully described and claimed.

In the accompanying drawings:—Figure 1 is a plan view of the trowel, the handle being shown in section. Fig. 2 is a side view thereof with the trowel bent. Figs. 3 and 4 are sections through the handle showing different adjustments thereof. Fig. 5 is a perspective of one of the shanks used with the handle.

My invention relates to an improvement in trowels and consists of an oblong steel blade 10 preferably rectangular in form, and adjacent each end of this blade is secured a hinge piece 11 provided with spaced ears 12.

The handle of the trowel, preferably of iron, consists of a body 13 provided with an opening or bore 14 extending longitudinally therethrough, the opening or bore being provided at its opposite ends with right and left threads terminating at center of handle, one of the threads 15 being right-handed, and the other left-handed. Into this threaded handle extends corresponding right and left threaded shanks 16 of T-shaped hinges, these members each provided with an ear 17 which fits between the respective ears 12 and is held in position by a pintle 18. It is to be noted that each of these shanks has a downwardly bent end or elbow 19 so that when the device is in its flattened position the handle 14 may be grasped without the handle coming in contact with the trowel. As can be seen from an inspection of Fig. 2 when the handle is rotated the trowel which is normally flat will have its ends so drawn together as to form any desired shape of concave to a half circle. It is further to be noted as in Fig. 5, that the shanks 16 are provided upon their upper faces with flattened portions 20 adapted to be engaged by set screws 21 which set screws pass down through the handle 13 and engage the shank 16 upon its flattened portion 20 thus firmly holding the trowel at any desired concave, thus enabling the operator by a full even width of stroke to avoid the unnecessary number of strokes as now required by the ordinary narrow or longitudinal blade. The trowel having the handle located over the center of the blade gives a steady control to the operator which is not the case in blades having the handle nearer the end or past the center as in other trowels now in use for concave or flat surfaces. When in concave form the operator is enabled without extra strokes to cut away all uneven ridges or bumps, receiving such cut-away portions on the upper side of the blade keeping the bottom of the gutter free from loose or cut-away material and collecting such cut-away portions on the concave side of the blade, the concave of the trowel being so constructed as to resist any pressure from below. Furthermore, the threaded hinge arrangement prevents wabbling as in the case where links are used.

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

1. A trowel comprising an elongated flexible blade, a hinge member secured adjacent each end thereof and provided with spaced hinge ears, a handle, said handle provided with a centrally arranged longitudinally extending bore provided with left hand threads extending from one end thereof and right hand threads extending from the other end thereof into said bore and to the central portion thereof, adjustable connecting means carried by said handle and said blade comprising elongated threaded shanks provided with flattened portions upon their upper sides, the outer ends of said shanks being provided with laterally bent portions terminating in pintle attaching means and pivotally connected to said hinge members, said shanks fitting into said threaded bore, said handle adapted to be rotated upon said shanks whereby to adjust either end of the blade and means carried by said handle and

engaging said flattened portion of said shanks whereby to hold the blade in a certain position.

2. A trowel comprising a flexible elongated blade, a hinge member secured adjacent each end thereof provided with spaced hinge ears, a handle having a longitudinally extending bore provided at one end with left hand threads and at the other end with right hand threads extending into said bore to the center thereof, a plurality of threaded shanks threaded upon said bore, said shanks provided with a flattened upper surface, the outer ends of said shanks provided with a laterally bent portion terminating in a pintle engaging means whereby said shanks are pivotally mounted upon said blade by means of said hinged members to which they are attached whereby the handle is held at a spaced distance from said blade, said blade capable of adjustment by means of rotating said handle upon said shank, said handle provided with a plurality of transversely extending apertures formed at right angles to said bore, pins threaded in said apertures and adapted to engage the flattened portion of said shank whereby to prevent said handle from further rotation whereby the blade is held in a set position.

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

GEORGE S. BRICKER.

Witnesses:
C. M. LIGGETT,
ERVIN E. KOHL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."