

A. H. HAVARD.

GRAVE BRACE.

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991,981.

Patented May 9, 1911.

Fig. 1.

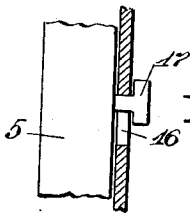
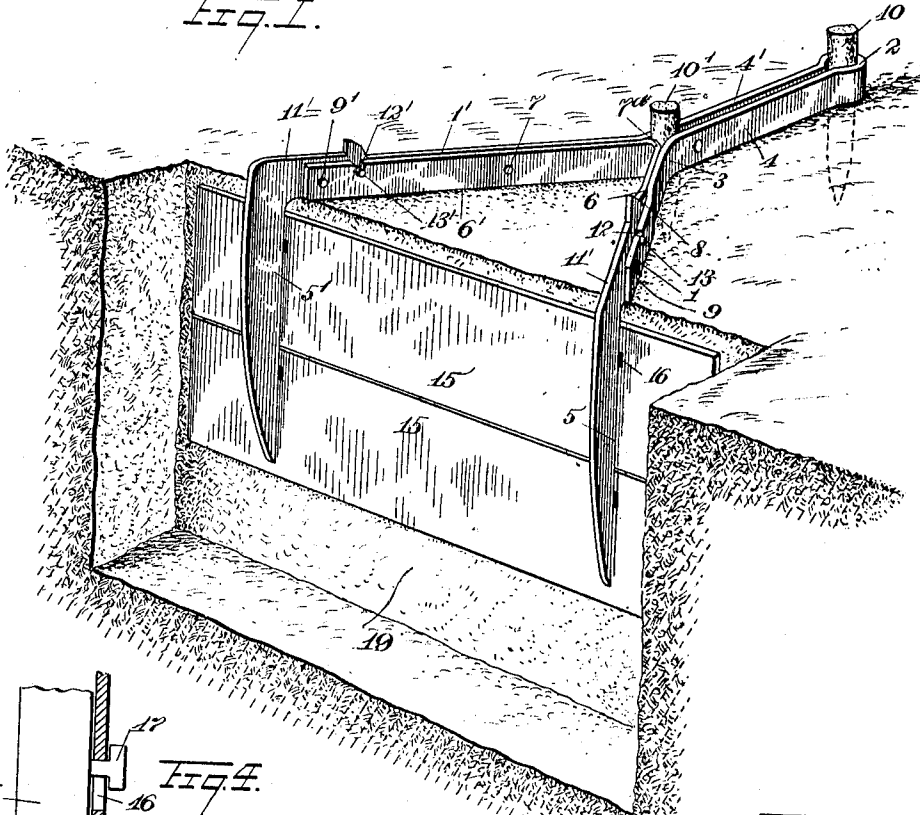


Fig. 4.

Fig. 2.

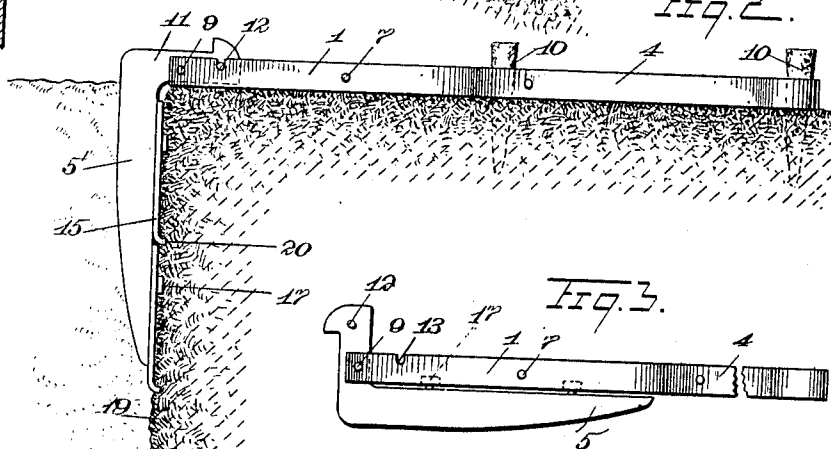
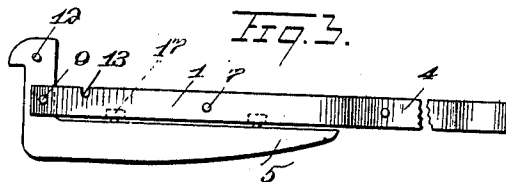


Fig. 3.



WITNESSES:

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GRAVE-BRACE.

991,981.

Specification of Letters Patent.

Patented May 9, 1911.

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To all whom it may concern:

Be it known that I, ALBERT H. HAVARD, a citizen of the United States, and a resident of Urbana, in the county of Champaign and State of Illinois, have invented a new and Improved Grave-Brace, of which the following is a full, clear, and exact description.

My invention relates generally to a device which may be used for preventing the caving in of the earth adjacent an excavation and more particularly it relates to a structure of few parts and simple formation which is particularly adapted to prevent the sides of a grave falling in.

Reference is to be had to the accompanying drawings forming a part of this specification, in which like characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a perspective view of my device in position for use, a portion of the excavation being shown; Fig. 2 is a side view of the device in the position shown in Fig. 1; Fig. 3 is a side view of the device in folded position when not in use; Fig. 4 is a partial sectional view showing the means whereby the side wall members are held in position on the legs.

The device includes a pair of diverging arms 1, 1', preferably made of a single piece of sheet metal which is bent about the central portion 2, the parts 4, 4', adjacent the portion 2 being extended parallel to each other for some distance and then made divergent at the point 3.

Each of the arms 1 and 1' is adapted to support suitable leg members 5, 5', which are pivotally carried thereby and to this end each of the arms 1 and 1' is provided with a second member 6, 6' in engagement therewith, and also preferably formed of a single sheet of metal having a centrally bent portion 7^a. The parts 1 and 6 and 1' and 6' may be held together by any suitable means such as rivets 7, and each of the members going to make up each arm is suitably spaced at a point beyond the rivet, the space between these members being adapted to receive one end of the leg members 5, 5', rivets 9, 9' being provided which engage each of the members and the said leg members. The arms 1, 1', with the rearwardly extending members 4 and 4' lie preferably in the same plane and to the end that the said part may be maintained in any position on the ground, stakes 10 and 10' are driven

into the ground and between the members 4 and 4'.

Each of the legs 5, 5' is provided with a rearwardly extending portion 11, 11', which portions extend at right angles to the legs proper and are provided with openings engaging the rivets 9 and 9' about which each of the legs may be rotated into the position shown in Fig. 3.

In order to maintain the relation between the legs proper and the arms 1 and 1' when the device is in use, as shown in Fig. 1, the inner member 6, 6' of each of the arms is provided with recesses 12, and 12', into which the pin 13, 13', carried by each of the portions 11, 11', is adapted to engage, thereby limiting the movement of the legs about the pivots 9 and 9'.

The remaining portion of my device includes any desired number of wall retaining members 15 provided with a suitable number of openings 16, these openings being engaged by headed lugs 17 carried on the inner side portion of each of the arms 5, 5' when the parts are in position for use. It will be noted that each of the openings 16 in the members 15 is substantially of the same length as the headed portion of the lugs 17, whereby the members 15 may be hung in position on the legs and will be prevented from movement relatively thereto.

As a further means for insuring the position of the members 15 relatively to the side wall 19 of the excavation, I have shown the lower edged portion of each of the members 15 as upwardly turned as at 20, this upwardly turned portion being adapted to firmly engage in the side wall of the excavation when the device is in use as shown in Fig. 2. When it is desired to place the brace in position for use after the excavation has been made, the legs are brought from the position shown in Fig. 3 to that shown in Fig. 1 and the arms 1 and 1' are placed on the ground adjacent the grave with the legs 5, 5' extending therein. The members 15 are then hung in position on the lugs 17 and the members 15 are then brought into firm engagement with the side wall 19 of the excavation and when in such position the stakes 10, 10' may be driven into the ground, as shown in Fig. 1, which will insure the position of the brace. The members 15 being in engagement with the side of the grave prevent the sides from giving way and earth falling into the grave when any

pressure is brought to bear adjacent the edge thereof, as when the box is lowered into the grave. In place of the stakes 10, any other suitable means may be used to hold the arms in position with the members 15 in engagement with the side wall of the grave, such means including a wire stretcher of ordinary construction. It will be noted also that the position of the legs 5, 5' with respect to the arms 1, 1' is fixed when the device is in use because of the engagement of the pins 12, 12' in the recess 13, 13'.

It will be apparent from the foregoing description that I have provided a simple brace, made up of few parts, which is easily handled and efficient in its use; it will be obvious that the sizes of the different members may be varied to meet different conditions without departing from the spirit of the invention as defined in the appended claims.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent:—

1. A grave brace, comprising arms having leg members pivoted at one end thereof, the said members extending substantially at right angles to the arms, means carried by the leg members for engagement with the side wall of the grave, and means for holding the said members in position with the side walls.

2. A grave brace, comprising arms for engagement with the ground adjacent a grave, leg members carried at one end of each of the arms and extending into the grave, members carried by the legs and in engagement with the side wall of the grave, and means for holding the arms fixed in position on the ground.

3. A grave brace, comprising a pair of diverging arms for engagement with the

ground adjacent the grave, a leg member carried at the free end of each arm and extending within the grave, a plurality of members carried by said legs and in engagement with the side wall of the grave, and means engaging the ground and the said arms whereby the position of the arms relatively to the ground is fixed.

4. A grave brace, comprising diverging arms having leg members at the free ends thereof, the said leg members extended at substantially a right angle to the said arms, a plurality of members for engagement with the side wall of a grave, and means carried by the leg members in engagement with the said members whereby they are held in position thereon, and means for fixing the arms in position on the ground.

5. A grave brace, comprising a pair of diverging arms having a member extending therefrom at the point of divergence, the arms being adapted for engagement with the ground adjacent a grave, a leg member having a portion extending within the grave carried at the free end of each arm, a plurality of members carried by the said leg members for engagement with the side wall of a grave and stakes in engagement with the ground and the said arms whereby the position of the arms on the ground is maintained, and the members in engagement with the side wall of the grave prevent the earth from caving into the grave.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT H. HAVARD.

Witnesses:

PETER P. SCHAEFER,
W. J. DOLAN.