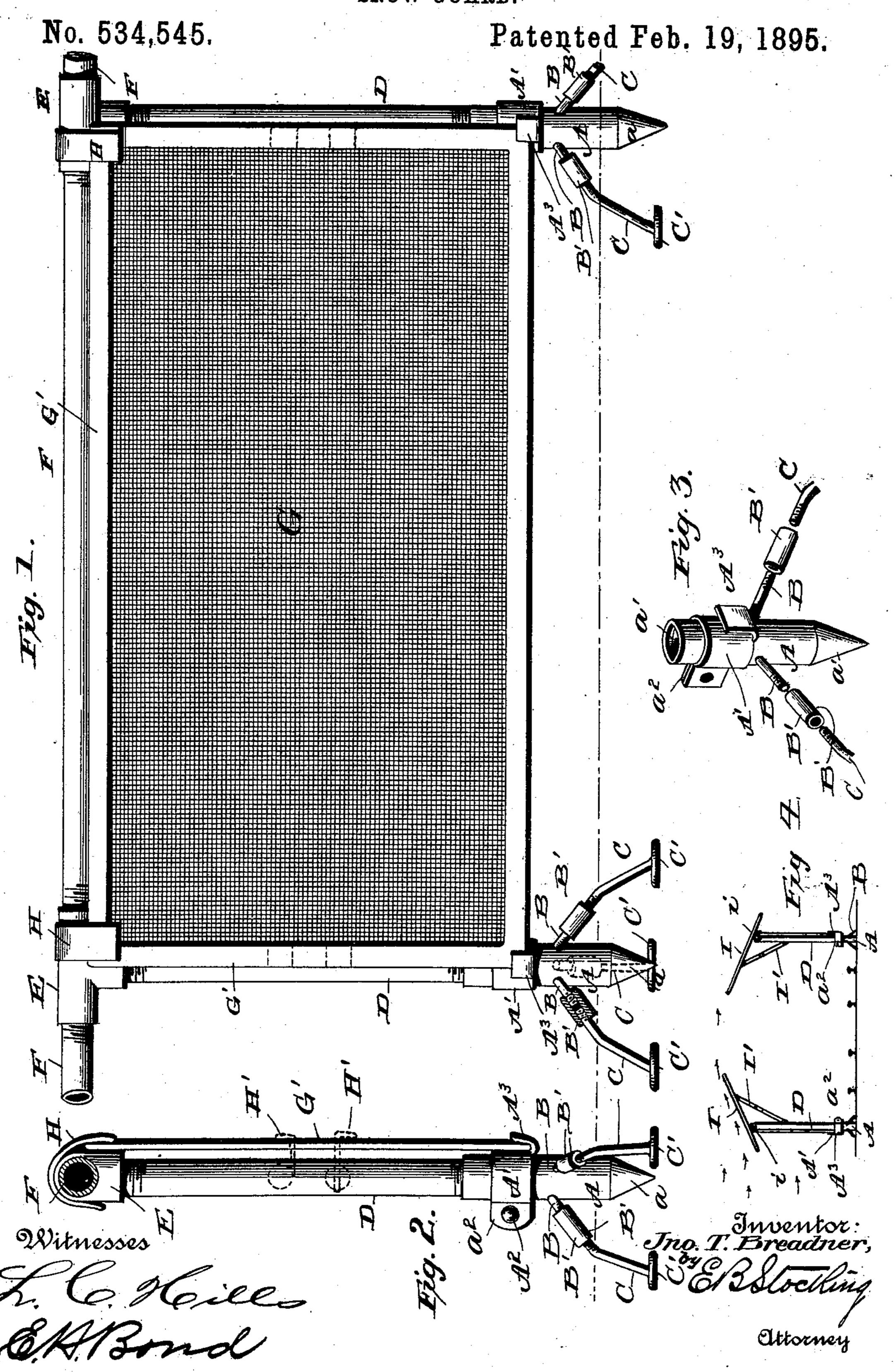
J. T. BREADNER. SNOW GUARD.



United States Patent Office.

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SNOW-GUARD.

SPECIFICATION forming part of Letters Patent No. 534,545, dated February 19, 1895.

Application filed May 10, 1894. Serial No. 510,749. (No model.)

To all whom it may concern:

Be it known that I, John T. Breadner, a citizen of the United States, residing at Port Henry, in the county of Essex, State of New York, have invented certain new and useful Improvements in Snow-Guards, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to snow-guards or 10 shields designed more especially for use along the railway tracks and in localities and at points where the snow is apt to drift and thus impede travel, and it has for its object among others to provide a simple portable snow 15 guard which can be readily set up at any desired point, and which may, or may not be provided with means for deflecting the snow across or over the track or roads. I provide sockets designed for receiving the standards 20 of the guard, which sockets are adjustably held in place by means which will be sufficient to hold the same against the force of the storm and are provided with devices for supporting and holding the lower edge of the 25 guard.

The guard may be made in one piece or in sections as may be desired and is held at the upper edge by devices, such as clamps, which permit of its ready removal when occasion may require. When the deflecting plates are employed they are so mounted as to permit of their being turned at any desired angle so as to utilize the force of the wind in carrying the snow across or over the track.

In locations where it will be necessary or advisable to employ the guard during the entire winter the anchoring means for the sockets may be permanently affixed in position by being inserted in the ground or anchored in rocks or other supports.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side elevation of one form of 50 my improved snow guard set up, with portions broken away and parts in section. Fig.

2 is an end elevation thereof. Fig. 3 is a perspective of the socket, its clamp, and the anchoring means. Fig. 4 is an end elevation showing a guard upon each side of the track 55 and each provided with a deflecting plate.

Like letters of reference indicate like parts

throughout the several views.

Referring now to the details of the drawings by letter, A designates a socket prefer- 60 ably with pointed end as seen at a to facilitate its insertion in the ground, its upper end being screw-threaded as seen at a' to receive the threaded lower end of the standard of the guard. This socket is provided with a clamp- 65 ing collar A' which encircles the same with its ends extended to form the lugs a^2 which receive the bolt or screw A2 to clamp the same around the socket. At the opposite side the collar carries the upwardly-extending portion 70 A³ which projects beyond the socket sufficiently to leave a space for the reception of the lower end of the guard which is designed to be held by the said upwardly-extending portion as seen in Figs. 1 and 2.

The socket pieces may be anchored in position in a variety of ways. I have shown what at present I consider one of the most preferable. Projecting at an angle from the socket are the screw-threaded rods or projec- 80 tions B preferably three in number so as to form a tripod base, and these rods receive the coupling sleeves or collars B' which in turn receive the threaded upper ends of the rods C which may be anchored in the ground in 85 any suitable way, in stone or other foundations, or they may be provided at their lower ends with feet C' as shown in Figs. 1 and 2 which will be held in the earth in any suitable manner. These couplings are right and 90 left screw threaded and by manipulation the sockets may be straightened up or adjusted as occasion may require.

D are the standards which are preferably of tubing of any required diameter screw 95 threaded at their upper and lower ends, the lower ends being screwed into the upper ends of the sockets as shown, while their upper ends are engaged in the T-couplings E which are joined by the pipe F which may be of a 100 length required, and two, three or more of the guards may be arranged in line by simply

extending the upper pipe as indicated in Fig. 1 and providing the necessary number of

sockets.

The guard is made of some reticulated ma-5 terial, such as perforated metal, or wire screening as shown and the said material G is held in any suitable manner to a frame G' which is designed to be supported as follows:-Its lower edge is inserted in position and there to retained by the holders A3, and its upper edge by the clamps H which are of spring material and are mounted on the rod or pipe F or the couplings E in such a manner as to slide thereon in the direction of the length thereof 15 so as to be placed at any desired point and also mounted so as to be moved on or around the pipe or coupling to and from the upper edge of the frame G' so that the said frame may be placed in position, the clamps being 20 first moved back so that their lower front ends will be at a higher point than the top of the frame and then moved back into the position in which they are shown in Figs. 1 and 2 to clamp the upper portion of the frame and 25 hold it against displacement.

For convenience in handling the frame may be made in sections as indicated by dotted lines in Figs. 1 and 2, in which case additional clamps or holders will be provided as seen at H' in Fig. 1 and which should be mounted for pivotal movement so they may be turned up or down as occasion may require.

In Fig. 4 I have shown one of my guards upon each side of a track, and in this instance each is provided with a deflecting plate I pivotally mounted as at i on the upper end of the guard as upon the couplings and braced by guys or braces I' which are adjustable so that the plates may be turned at any desired angle to deflect the snow across or over the tracks as indicated by the arrows in Fig. 2.

Modifications in details of construction may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages. The tapering lower end of the socket piece serves to aid in preventing the throwing of the same by the frost.

Importance is attached to the reticulated l

guard Gas it has been found that by the employment of such material the guard is less 50 liable to injury from the winds which pass through the meshes of the material while the snow is stopped by the guard.

What I claim as new is—

1. A snow guard formed of a material pro- 55 vided with a plurality of passages therethrough and throughout its entire surface, substantially as shown and described.

2. A snow guard composed of detachable portable supporting portions and a frame pro- 60 vided with a reticulated medium designed to

be supported thereby, as set forth.

3. The combination with a reticulated snow guard and a frame therefor, of detachable supporting devices therefor and holding 65 means, as set forth.

4. A reticulated snow guard provided with an adjustable deflecting plate, as set forth.

5. A reticulated snow guard provided with a pivoted deflecting plate, as set forth.

6. A socket-piece provided with inclined projections and a clamp collar with a holder for a snow guard frame, as set forth.

7. A socket-piece provided with inclined projections, combined with anchor rods and 75

couplings, as set forth.

8. The combination with sockets having anchoring means, of the standards, couplings and upper connecting pipe, the removable guard frame, and clamps for the upper edge 80 of the frame, as set forth.

9. The combination with the sockets with anchoring means, of the standards detachably engaged in said sockets, couplings at the upper ends of said standards, the upper connecting pipe, the holders on the sockets for the lower edge of the snow guard frame, the removable frame with its reticulated medium, and the movable clamps for the upper edge of said frame, substantially as specified.

In testimony whereof I affix my signature

in presence of two witnesses.

JOHN T. BREADNER.

Witnesses:

THEOPHILE J. JOBIN, HYDE R. BARNETT.