

No. 745,452.

PATENTED DEC. 1, 1903.

D. D. McBEAN.

SHEETING.

APPLICATION FILED MAY 9, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1

Fig. 3

Fig. 2

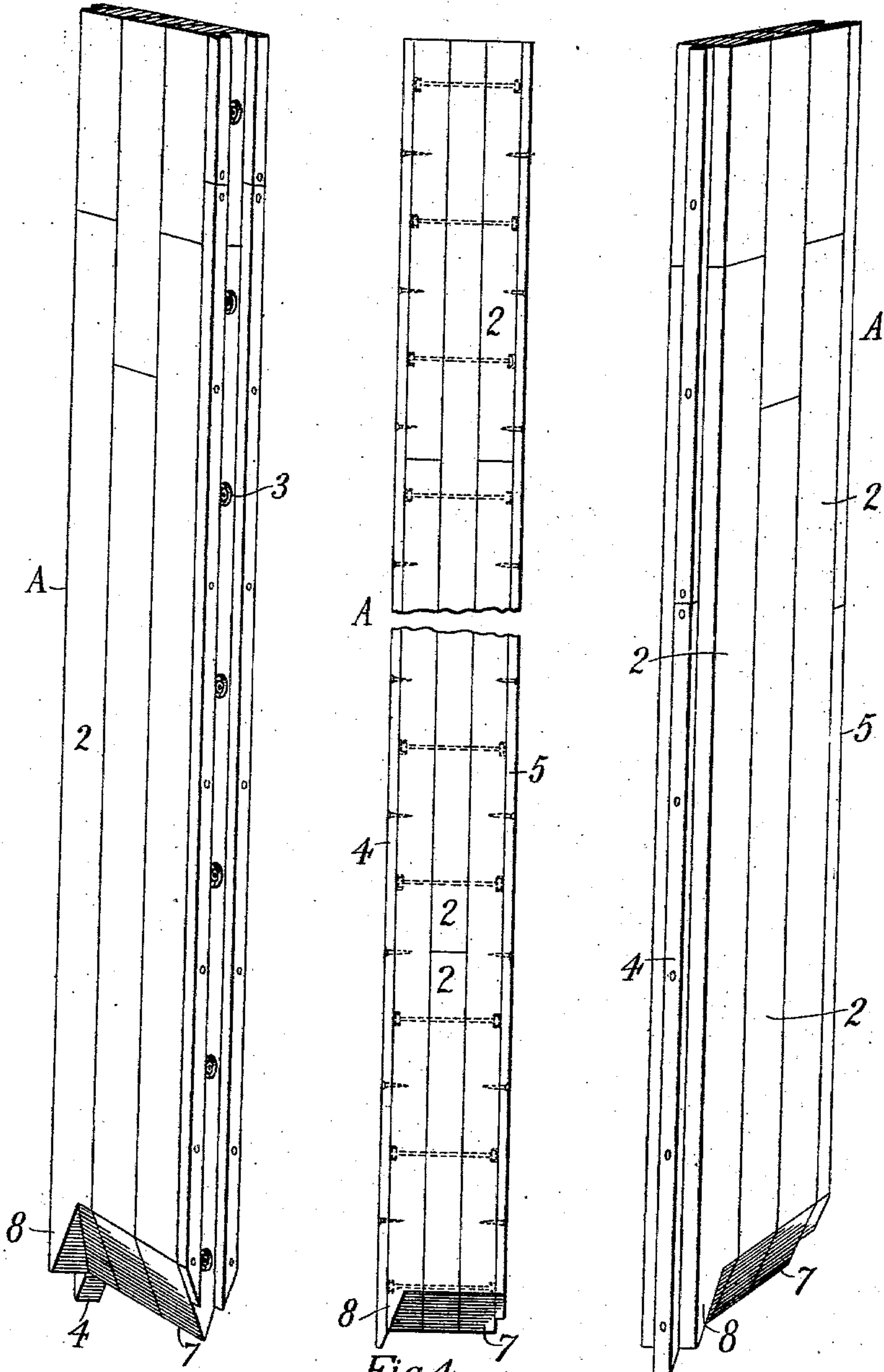
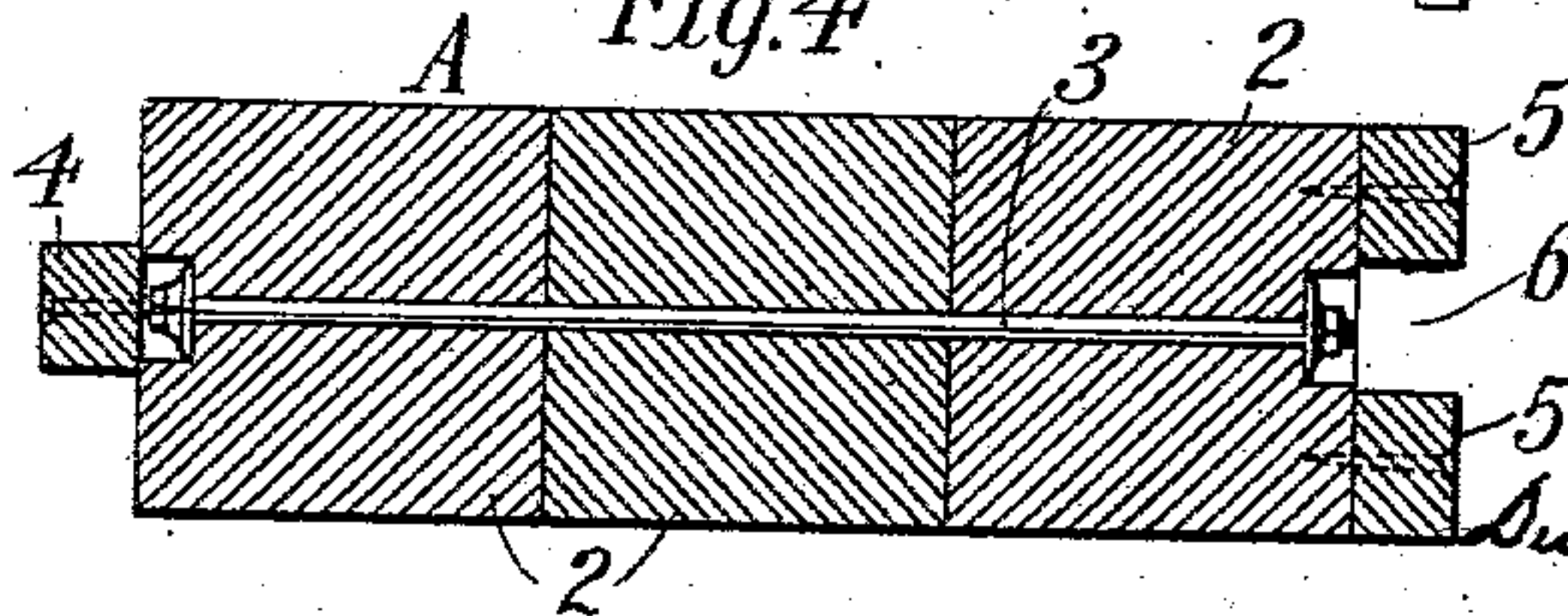


Fig. 4



Witnesses:  
Raphael Ketter  
Pierce J. Powers.

Inventor  
Duncan S. McBlair  
by J. S. Merriam Att'y

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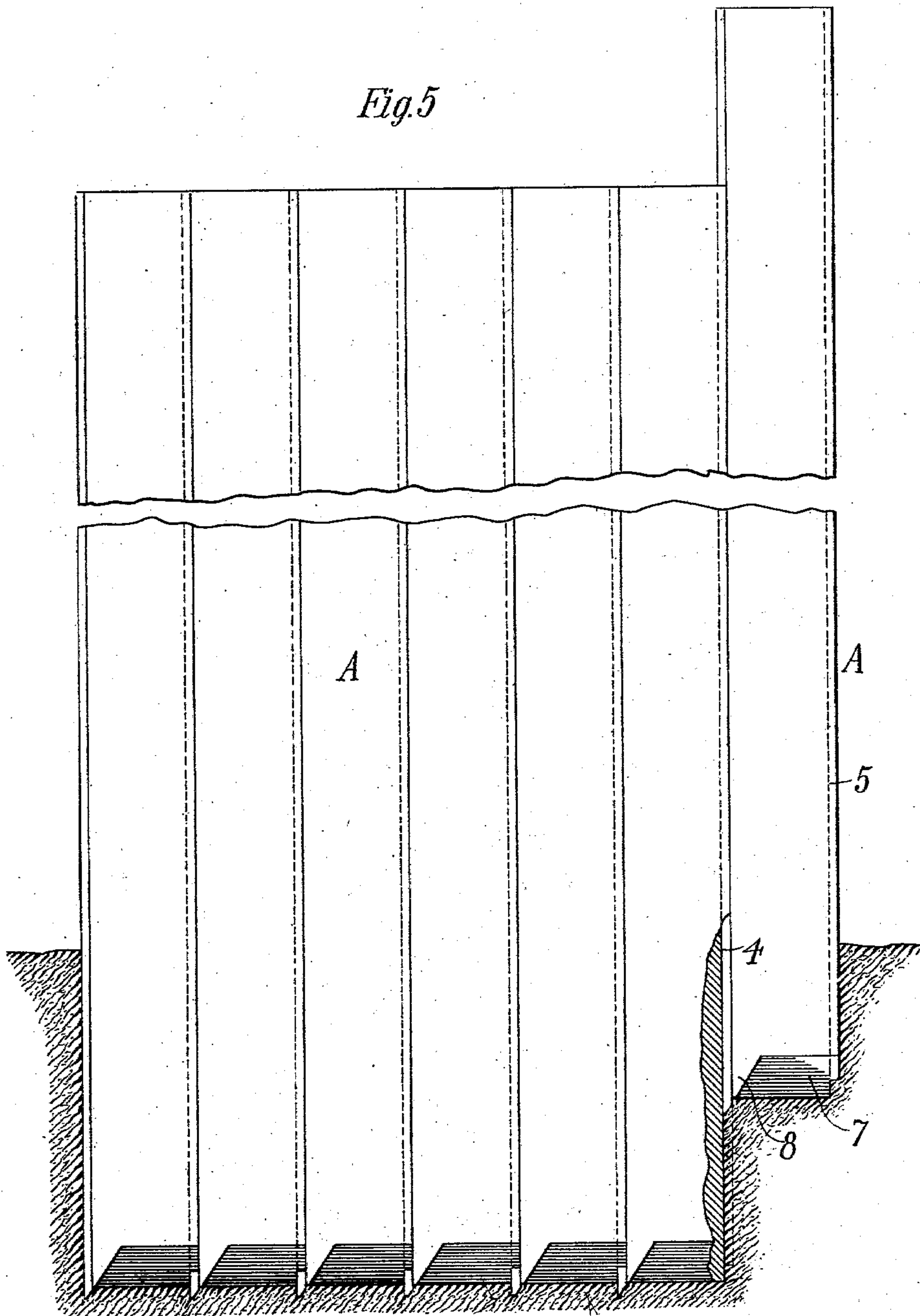
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APPLICATION FILED MAY 9, 1903.

NO MODEL.

2 SHEETS—SHEET 2.

*Fig. 5*



*Fig. 6*



Witnesses:  
*Raphaël Petter*  
*Pierce J. Powers*

*Dunsand McBean* Inventor

by *L. D. Merriam* Atty



## UNITED STATES PATENT OFFICE.

DUNCAN D. McBEAN, OF NEW YORK, N. Y.

## SHEETING.

SPECIFICATION forming part of Letters Patent No. 745,452, dated December 1, 1903.

Application filed May 9, 1903. Serial No. 156,406. (No model.)

*To all whom it may concern:*

Be it known that I, DUNCAN D. McBEAN, of the city, county, and State of New York, have invented a new and useful Improvement in Sheeting, of which the following is a specification.

My invention consists in an improved form of sheeting for use in sewer, tunnel, and other excavating work for the purpose of supporting the adjacent wall or bank of earth; and it consists in the features of construction hereinafter described and claimed.

In excavating-work of great depth it becomes necessary to employ sheeting for supporting the earth side walls of greater lengths than can be readily obtained in the form of single-piece timber. It is also essential to have the sheeting of such width that it can be controlled in driving and not twist or turn out of alinement, as is apt to be the case with single-piece timber of ordinary width. To meet the requirements of such work, I provide a composite or built-up sheeting made of a series of short pieces bolted together and finished as hereinafter described.

In the accompanying drawings, forming part of this specification, Figures 1 and 2 are perspective views of a piece of sheeting, Fig. 1 showing the grooved edge and Fig. 2 the tenon edge of the same. Fig. 3 is an elevation, and Fig. 4 is an enlarged cross-section, of the same. Fig. 5 shows a series of sheetings driven into the earth, forming a wall; and Fig. 6 is a cross-section of the same, showing the interlocking tongue-and-groove connection between the several sheetings.

As shown in the drawings, the sheeting A is built up of series of preferably square sawed timber 2 of varying lengths secured together by bolts 3 in sets of three, as best shown in Fig. 4, the dimensions of the timber which I have commonly used in heavy work being twelve inches by twelve inches, thus constituting a composite sheeting twelve inches by thirty-six inches in cross-section. By the breaking of joints between the short pieces of timber in the building up of the sheeting it may be made of any desired length. The edges of the sheeting A are provided with tongues and grooves by spiking or bolting upon the medial line of one edge the tenon-strip

4 and upon the outer margins of the opposite edge of the sheeting similar strips 5 5, leaving a groove 6 between of the same dimensions as the tenon 4, whereby in the assembling of the sheeting in construction-work the tenon of one sheeting-piece will work in the groove of the one adjacent. The lower end of the sheeting is preferably chamfered or sharpened on both sides, as at 7, to enable it to penetrate the soil more readily. In order to hold the sheeting while being driven in close contact with the adjacent sheeting which has been already driven, a tapering lip 8 is left upon each face of the sheeting at the edge adjacent to the driven sheeting, by the wedging action of which as it enters the earth the sheeting is crowded against the adjacent piece already in position. The projecting and tapered end of the tongue 4 as it passes downward in the groove of the adjacent sheeting which has already been driven serves to plow out of the groove any material which has lodged therein, leaving a free path and seat for the tongue. The sheetings when thus driven serially into the soil present the appearance shown in Fig. 5.

It is evident that by means of my invention a sheeting of almost any desired dimensions may be secured, the length being proportioned to the depth to which the excavation is intended to be carried and the thickness to the load which it must support when in position.

I claim—

1. A composite sheeting having tongue-and-grooved edges, a chamfered or beveled point with the tongue projecting beyond the end of the sheeting, and means for laterally deflecting the sheeting when driven into the soil, for the purpose specified.

2. As a new article of manufacture, a composite sheeting comprising a plurality of similar rectangular timbers of varying lengths, secured edge to edge, the edges of the sheeting being provided respectively with a tongue and a groove, and the entering end or point of the sheeting being tapered across its width, and provided with inclined shoulders at one edge, substantially as set forth.

3. A composite or built-up sheeting having its edges tongued and grooved, a tapering



point and inclined shoulders adapted to laterally deflect the sheeting in entering the earth.

4. A built-up or composite sheeting comprising a plurality of rectangular members secured side by side by a series of lateral bolts, and having groove-and-tongued edges, the tongue projecting beyond the end of the sheeting and serving to clear out the groove in the adjacent sheeting, and deflecting-shoulders upon the sheeting-point, substantially as and for the purposes specified.

5. A built-up or composite sheeting having

not less than three members, secured together side by side by a series of lateral bolts, the splices or joints being formed by the staggering or breaking of the joints of the several members, and having a chamfered or beveled point and inclined shoulders, substantially as set forth.

Signed at New York city this 4th day of May, 1903.

DUNCAN D. McBEAN.

Witnesses:

ANNA W. McBEAN,  
J. T. CRANE.