

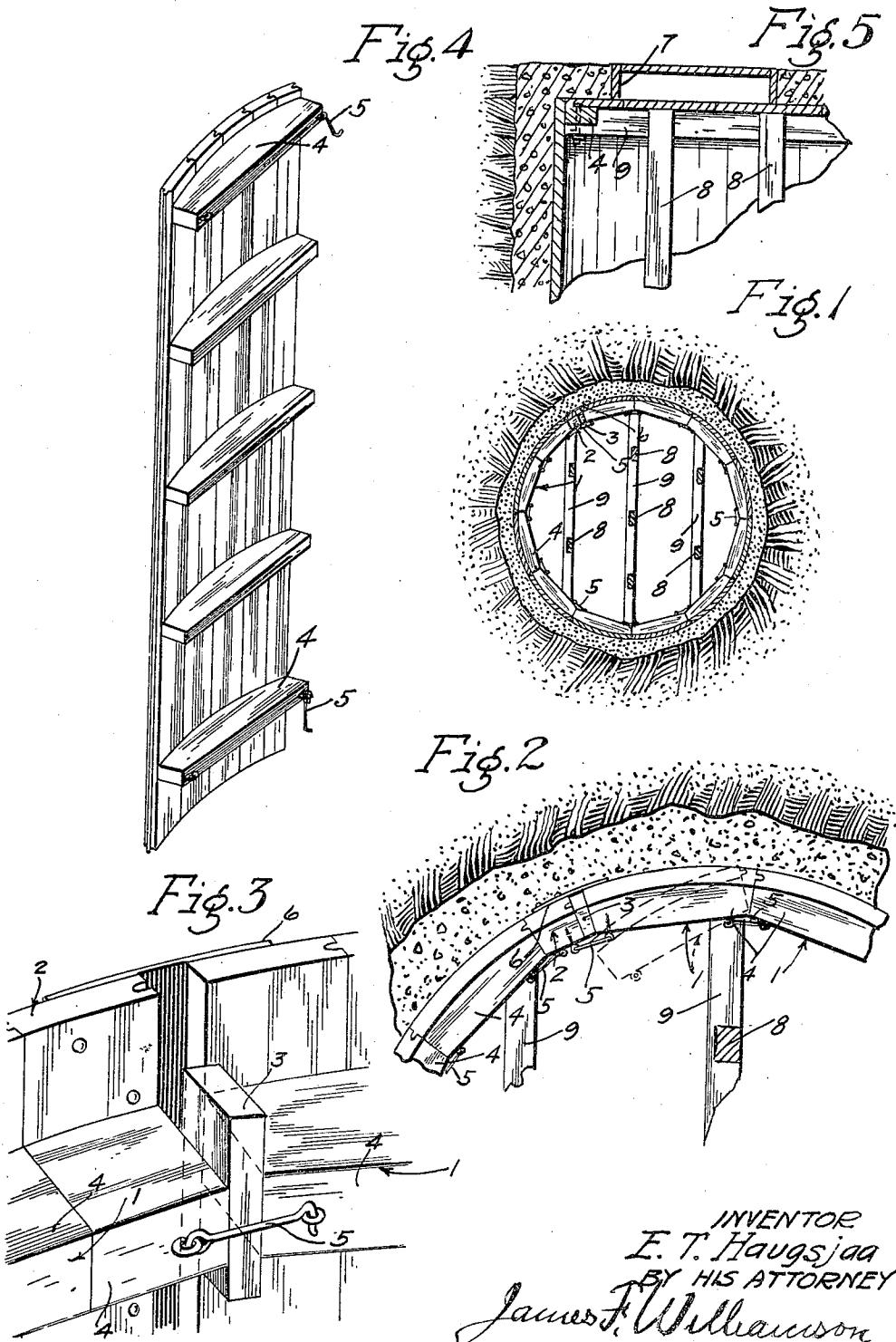
April 22, 1924.

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1,491,397

CONCRETE FORM

Filed Dec. 8, 1920



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CONCRETE FORM.

Application filed December 8, 1920. Serial No. 429,276.

To all whom it may concern:

Be it known that I, EGIL T. HAUGSJAA, a citizen of the United States, residing at Aberdeen, in the county of Brown and State of South Dakota, have invented certain new and useful Improvements in Concrete Forms; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to concrete forms, and particularly to such a form designed for use in making the side walls and top for a concrete cistern or any underground container. Cisterns of various kinds are now commonly made of concrete and it is an object of this invention to provide a form for making a concrete cistern of such simple construction that it can be quickly and easily assembled by one not particularly skilled in such work.

The efficiency and utility of the invention will be made clear in the following description made in connection with the accompanying drawings in which like reference characters refer to the same parts throughout the different views, and in which,

Fig. 1 is a transverse section of a cistern showing somewhat diagrammatically the structure of the form used in making the same;

Fig. 2 is a partial elongated top plan view of the form and cistern walls;

Fig. 3 is a perspective view of a portion of the top part of the form;

Fig. 4 is a perspective view on an enlarged scale of one of the segments of the form; and

Fig. 5 is a fragmentary section of a corner of the cistern.

Referring to the drawings, the form is seen to comprise a plurality of vertically disposed longitudinal segments 1, which are all, except one, of similar size. While any desired number of segments may be used, the applicant has in practice usually used a form having twenty sections. As stated, one of said sections is of different dimensions than the others and such section is made of smaller width, as shown at 2 and is slightly spaced longitudinally from an adjacent wider section. The sections are preferably constructed of joined boards which are closely fitted together by tongues and

grooves, or any other suitable means and which have secured thereto adjacent and intermediate of the ends, heavy segmental members 4, which, when the form is in place, are adapted to closely contact, end to end. Key members 3 of wedge shape formation are provided and these wedge members are designed to be driven or fitted between the ends of the member 4 on the short section 2 and its adjacent normal or wider section. Means are also provided for securing the narrow section 2 to its adjacent wider section, which, as illustrated in Figs. 2 and 3, has an ordinary hook device 5, but which it will be understood may be of any suitable type. An adjoining plate 6 is formed, riveted or otherwise secured to the outer side of the section 2 and is made of sufficient width to bridge the space between the same and the adjacent section and to overlap the latter. This plate prevents the concrete from entering the space between the narrow and wider section.

In assembling, the narrow sections may be placed first, then placing in position the wider sections successively engaged therewith around the wall until the wider section adjacent the narrow section is placed. The securing member will then be placed in position and the wedge 3 driven into place. This wedge 3 may be held merely by friction, or, if desired, it may be held by a nail driven through one of the members 4 and a slight distance into the same. When the wall has been filled in around the form and it is desired to take down the same, the securing device will be released, the wedge 3 loosened and driven from position and the wide section adjacent the smaller section can then be swung out as illustrated by dotted lines in Fig. 2. The remaining sections can then be quickly disassembled. Hooks and eyes can be used on the cistern, as shown in Figs. 1 and 4.

To form the top of the cistern, boards are placed across the sections on members 4 to form a floor which may be of sufficient thickness to be substantially level with the top of the form. Some of the boards so used are shown in Fig. 5, or ones suitably shaped can be placed across this floor to form an arch which will pass entirely across the top of the cistern, a suitable opening being left therein to form a manhole 7. The sections used for the top as stated, are supported in

members 4, but posts 8 fitted to grooved stringers 9 are also placed in the cistern and used as an additional support. Usually three of these stringers are used, as illustrated in Fig. 1, although their number can be varied, as desired. The form, of course, will be taken down when the cistern is completed, by a person entering the same through the manhole 7. The stringers and posts 8 will be released by lateral movement of the posts at the bottom thereof and the wall sections of the form then dismantled as above described.

It will thus be seen that applicant has produced an extremely simple form and one which can be quickly made of easily secured material. The members 4 are usually made of ordinary 2 x 4 joist suitably cut to shape, and the longitudinal members of heavy boards. It will be understood that various changes may be made in the form and details of applicant's device without departing from the scope of the invention, which, generally stated, consists in the matter

shown and described and set forth in the appended claim.

What is claimed is:

A concrete form for making the walls of a cistern, having in combination a plurality of segments formed of vertical panels secured to spaced transverse members, said panels and members being adapted to abut in close relation to form a substantially cylindrical structure, a vertically tapered wedge member adapted to be driven vertically between two of the adjacent transverse members, transverse stringer members extending across said cylindrical structure, vertical members adjacent thereto, and top forming panels adapted to be supported jointly upon the upper of said transverse members and upon said stringer members.

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

EGIL T. HAUGSJAA.

Witnesses:

C. F. HAUGE,

O. A. CALDWELL.