

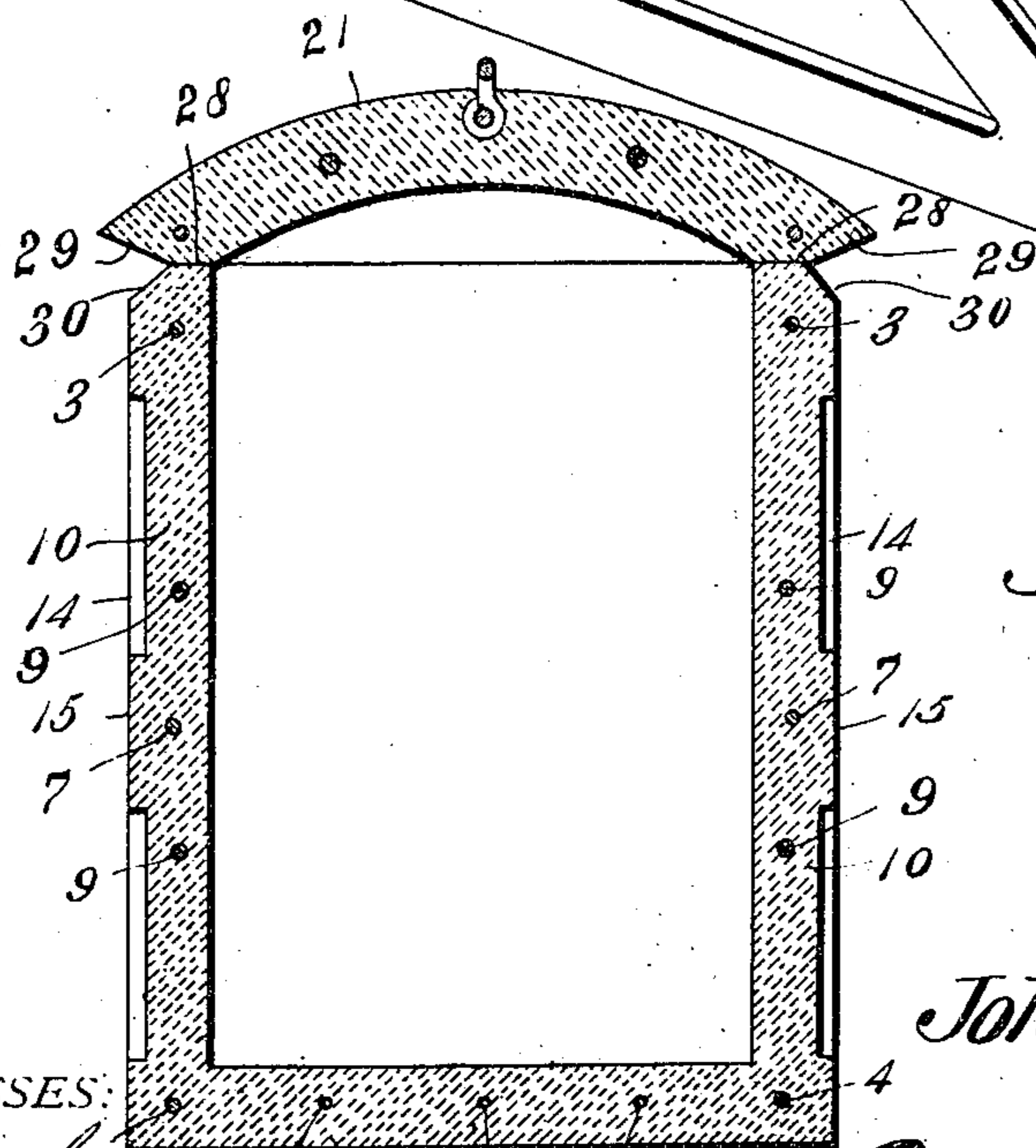
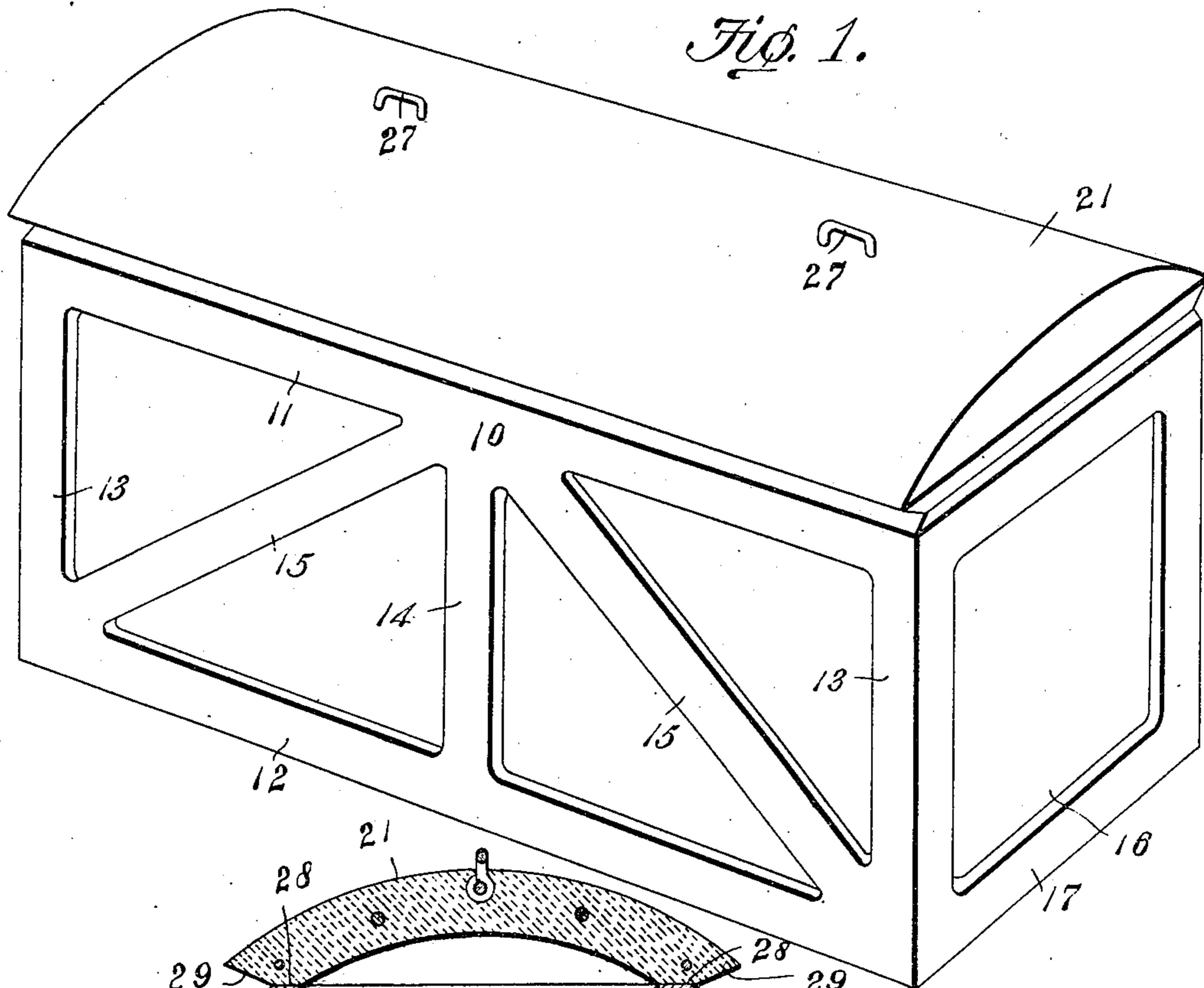
No. 831,799.

PATENTED SEPT. 25, 1906.

J. B. MURRAY.  
BURIAL VAULT.

APPLICATION FILED DEC. 14, 1905.

2 SHEETS—SHEET 1.



WITNESSES:

*E. H. Stewart*  
*H. A. Shepard*

*John B. Murray,*  
INVENTOR.

By *C. A. Snow & Co.*  
ATTORNEYS

No. 831,799.

PATENTED SEPT. 25, 1906.

J. B. MURRAY.  
BURIAL VAULT.

APPLICATION FILED DEC. 14, 1905.

2 SHEETS—SHEET 2.

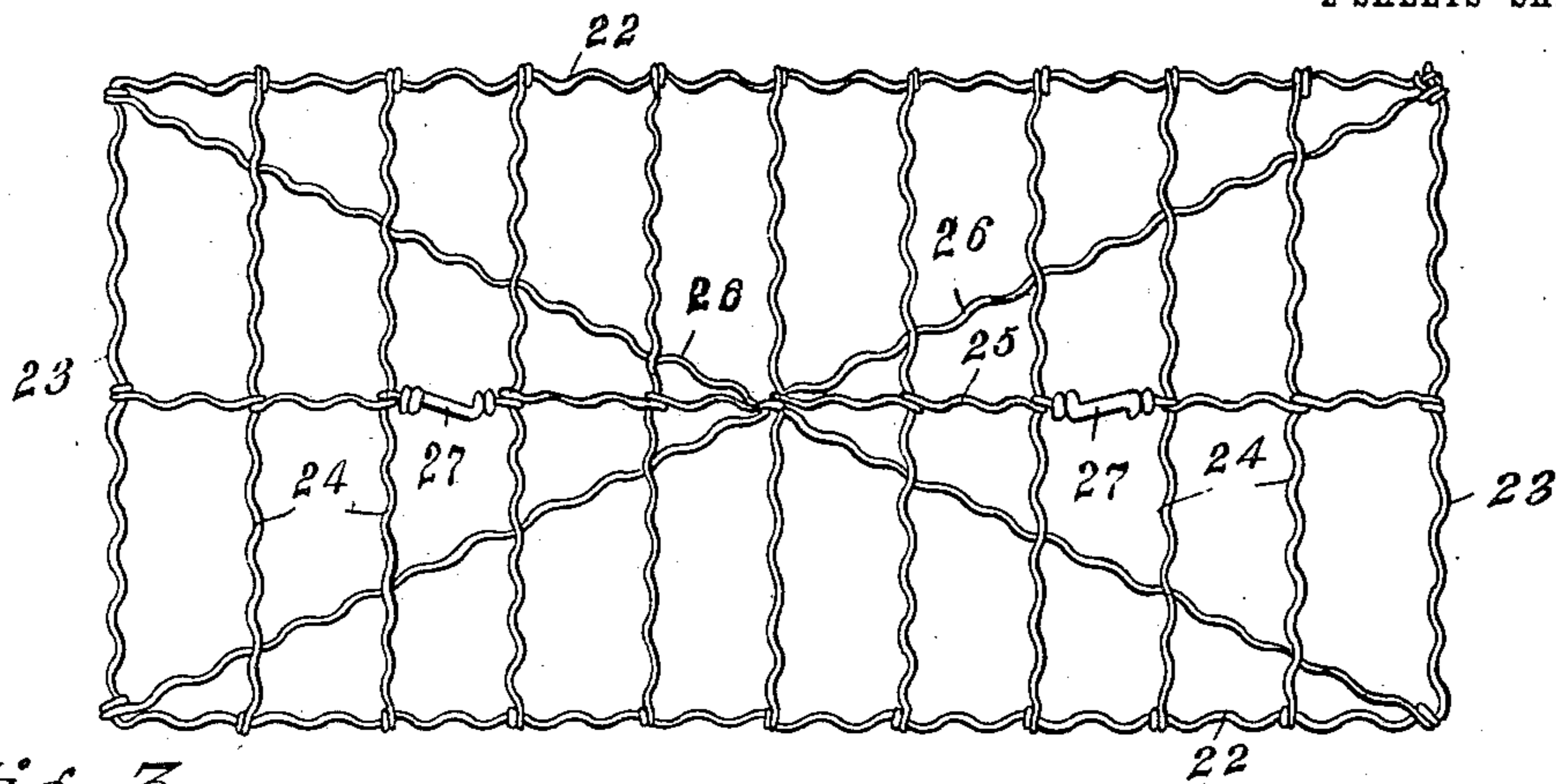


Fig. 3.

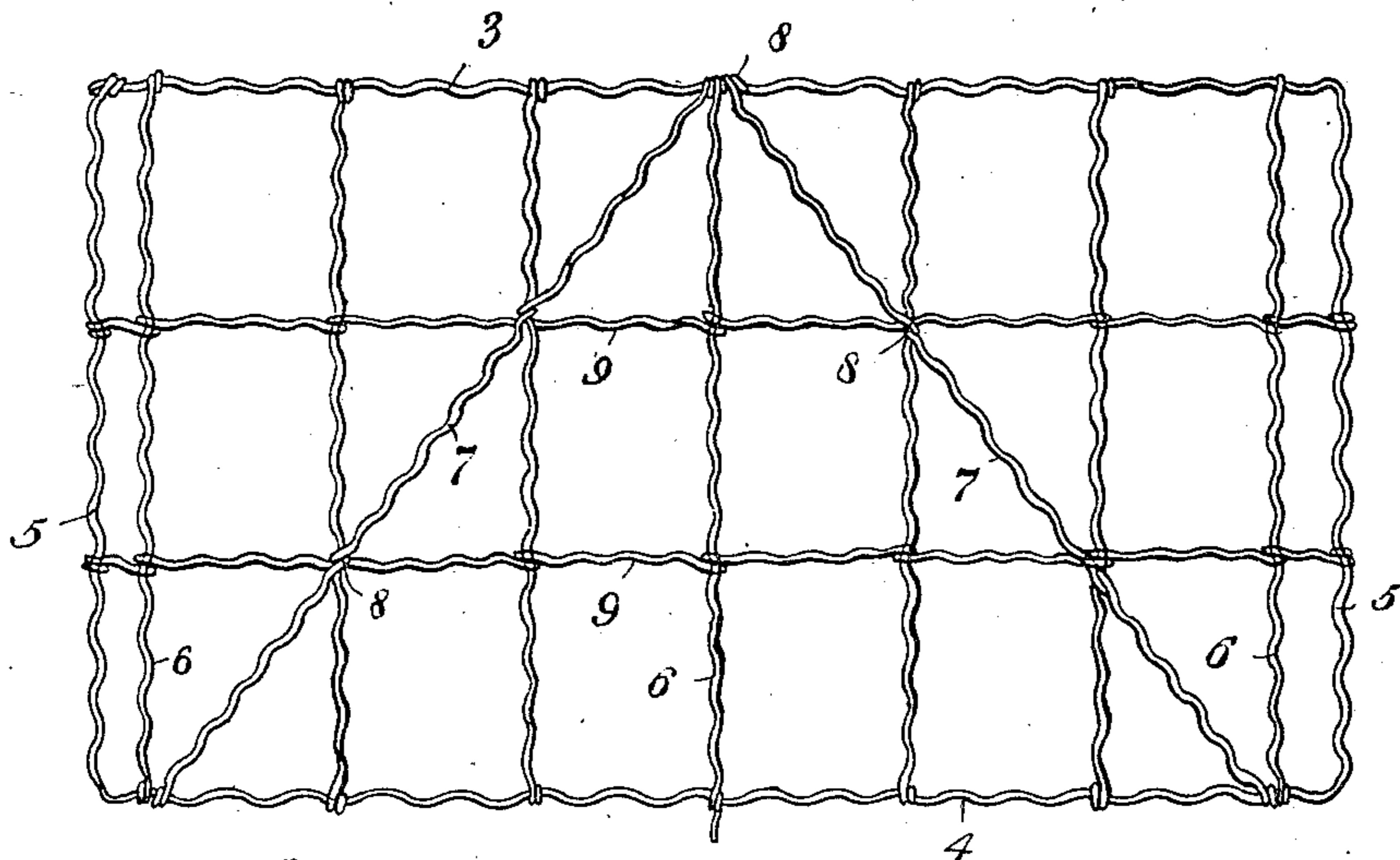


Fig. 4.

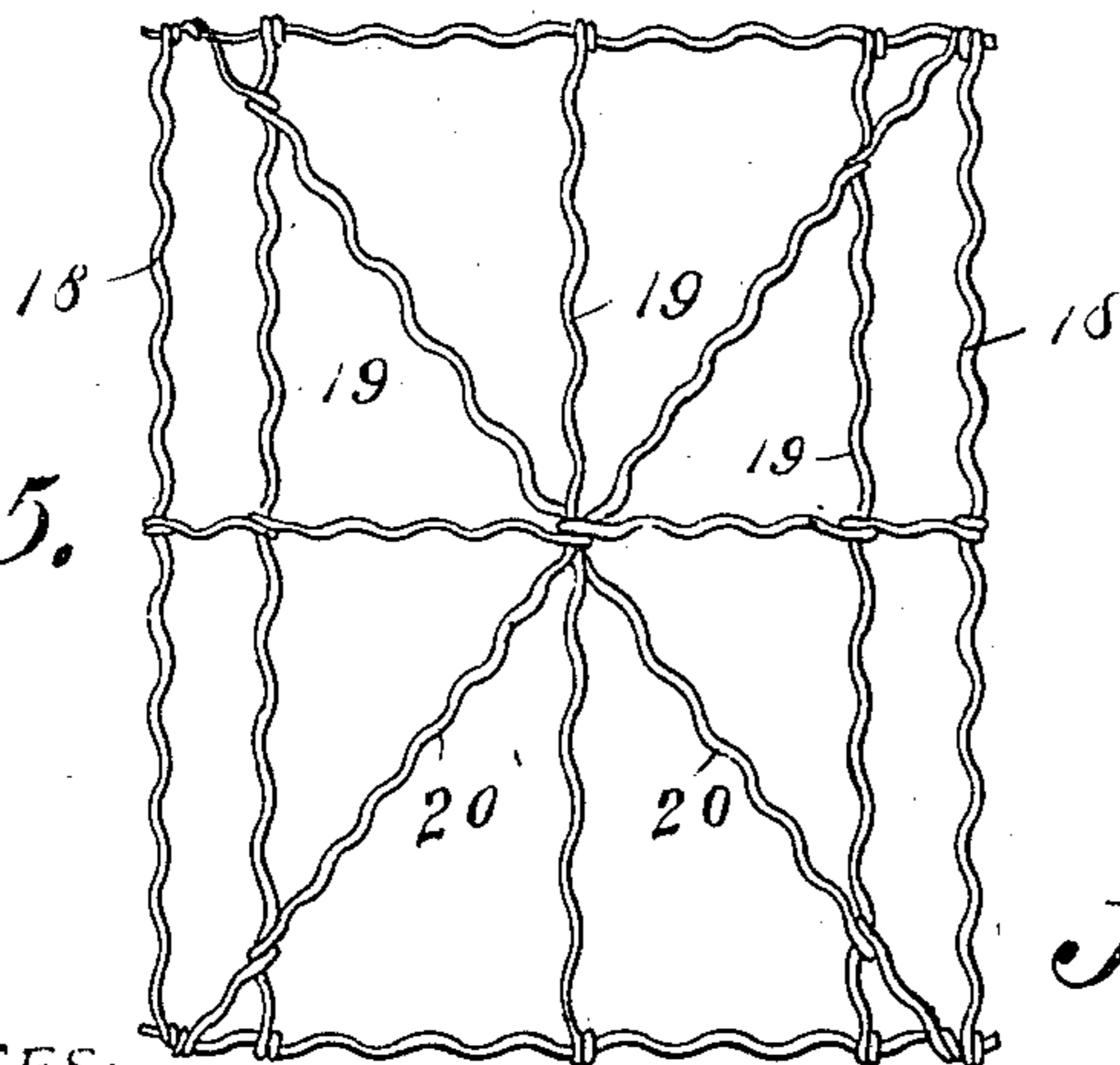


Fig. 5.

WITNESSES:

*E. J. Stewart*  
*H. A. Shepard*

*John B. Murray,*  
INVENTOR.

By *C. A. Snow & Co.*  
ATTORNEYS

# UNITED STATES PATENT OFFICE.

JOHN BRUFF MURRAY, OF ASHLAND, OHIO.

## BURIAL-VAULT.

No. 831,799.

Specification of Letters Patent.

Patented Sept. 25, 1906.

Application filed December 14, 1905. Serial No. 291,753.

*To all whom it may concern:*

Be it known that I, JOHN BRUFF MURRAY, a citizen of the United States, residing at Ashland, in the county of Ashland and State of Ohio, have invented a new and useful Burial-Vault, of which the following is a specification.

This invention relates to burial-vaults formed of cement or other plastic material; and its prime object is to secure strength and durability at a minimum of cost.

It is furthermore designed to employ a novel arrangement of wires in the construction of the vault, so as to compensate for contraction and expansion, and thereby to prevent checking and cracking of the walls of the vault under climatic changes.

A still further object of the invention is to enable the convenient sealing of the cover of the vault after it has been placed in the grave to effectually protect the green plastic seal during the filling of the grave.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a burial-vault embodying the features of the present invention. Fig. 2 is a cross-sectional view thereof. Fig. 3 is a detail view of the wire frame to be embedded in the cover of the vault. Fig. 4 is a detail view of the wire frame to be embedded in one of the side walls of the vault. Fig. 5 is a detail view of the wire frame to be embedded in one of the end walls of the vault.

Similar numerals of reference designate corresponding parts in all of the figures of the drawings.

As hereinbefore indicated, it is proposed to form the present vault from plastic material, which is preferably made up of iron-ore slag, coke-dust, ground cinders, and rosin, in the following proportions: iron-ore slag, two hundred pounds; coke-dust, one hundred pounds; ground cinders, fifty pounds; rosin, eight pounds.

The several ingredients in the proportions

enumerated are mixed with water into a plastic condition, such as may be poured into frames or molds for giving the desired configuration to the walls of the vault.

In building up the vault of the present invention the bottom 1 is formed by pouring the composition into a mold or frame, so as to produce a layer of material about one inch thick, whereupon kinked wires 2 are placed upon this layer, and then another layer is poured upon the first-mentioned layer, so as to have the kinked wires embedded centrally in the bottom slab of the vault. The longitudinal edges and end edges of the base-slab are left in the rough, so as to insure a snug and rigid joint between the edges of the base and the side and end walls of the vault.

Each longitudinal side wall is produced in the manner described for the base and has embedded therein a frame made up of kinked wires including top and bottom members 3 and 4, which are connected by end members 5. A series of cross-wires 6 extend between and are connected to the top and bottom wires 3 and 4 by being twisted around the same, and inclined brace-wires 7 extend from points at or adjacent the lower corners of the frame upwardly and inwardly to the middle of the upper member 3, each of the braces being twisted around such of the other wires as are crossed thereby, as indicated at 8. In addition to the cross-wires and the brace-wires there are two or more longitudinal wires 9, which are twisted about the other wires wherever they cross the same. The frame thus described is embedded centrally in the side wall in the manner described for the base-slab.

As best shown in Fig. 1 of the drawings, it will be noted that the exterior of each side wall 10 is molded so as to produce upper and lower external longitudinal ribs 11 and 12, terminal cross-ribs 13, an intermediate upright cross-rib 14, and diagonal ribs 15, the latter extending from the lower corners of the side wall upwardly to the middle of the upper edge thereof, whereby the said wall is materially strengthened. Attention is here directed to the fact that the wires of the frame which is embedded in the side wall are arranged so that certain of the wires are included in the respective strengthening-ribs of the wall, thereby to preserve the integrity of the ribs, and thus increase the strength and durability of the wall.

Each end wall 16 is provided upon its exterior with a peripheral rib 17, and in this end wall is embedded a frame made up of kinked wires, as shown in Fig. 5, said frame including side wires 18, cross-wires 19, and diagonal wires 20, said wires being intertwined at their points of crossing, as in the side frame.

The lid or cover 21 is in the form of an arch and has embedded therein a wire frame, as shown in Fig. 3, said frame including side wires 22, end wires 23, cross-wires 24, a longitudinal wire 25, and diagonal wires 26, the wires of course being intertwined at their points of crossing. Loop-shaped handles 27 are suitably secured to the longitudinal wire 25 and project above the lid or cover, as shown in Fig. 1 of the drawings. As best shown in Fig. 2 of the drawings, it will be noted that the lid or cover has a lower flat portion, as at 28, so as to rest upon the flat upper edges of the side and end walls of the vault. From the flat portion 28 the lid or cover is beveled or inclined upwardly and outwardly, as at 29, and this beveled portion is of a length to project beyond the side and end walls of the vault. Each side and end wall of the vault is beveled upwardly and inwardly at its top edge, as at 30, so as to meet the inner lower end of the beveled portion 29 of the lid or cover, and thereby form an annular V-shaped groove or seat to receive plastic cement for sealing the lid, so as to hermetically seal the vault.

In practice the vault, with the cover removed, is lowered into the grave, after which the lid or cover is lowered upon the vault, and then plastic material is applied by a trowel or otherwise to the annular groove or seat formed between the top of the vault and the cover, and then the grave is filled in the usual manner. It will here be noted that by reason of the lid or cover projecting externally beyond the side and end walls of the vault the green plastic seal is protected from the dirt which is being thrown into the grave,

and therefore the seal remains intact during the filling of the grave.

In connection with the preferred ingredients which make up the plastic material I find that in curing the vault by subjecting the same to steam the rosin melts and unites with the other ingredients, so as to form a strong and durable bond therefor in a short time and to a very effective degree. Moreover, the slag, coke-dust, and rosin render the walls waterproof, and all pores are filled up by the rosin. By employing kinked wires they automatically accommodate themselves to contraction and expansion in the walls of the vault, wherefore the latter are prevented from becoming checked and cracked, and the life of the vault is thereby materially increased.

Having thus described the invention, what is claimed is—

A burial-vault comprising a body portion, a cement cover engaging the body portion, an arched reinforcing-frame embedded in the cover and consisting of spaced longitudinal and transverse corrugated wires, the longitudinal wires being intertwined with the transverse wires, diagonal brace-wires intersecting the intermediate longitudinal wires and intertwined therewith and with the adjacent transverse wires, and handles spaced above the top of the cover and each formed of a single piece of wire the opposite ends of which are coiled in opposite directions around the intermediate longitudinal wire and bear against the adjacent transverse wires between the diagonal braces thereby to lock the handle against accidental displacement.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOHN BRUFF MURRAY.

Witnesses:

H. M. HARLEY,  
GRACE BENNER.