

No. 875,025.

PATENTED DEC. 31, 1907.

S. WHINERY.
CURB PROTECTOR.

APPLICATION FILED APR. 16, 1907.

Fig. 1.

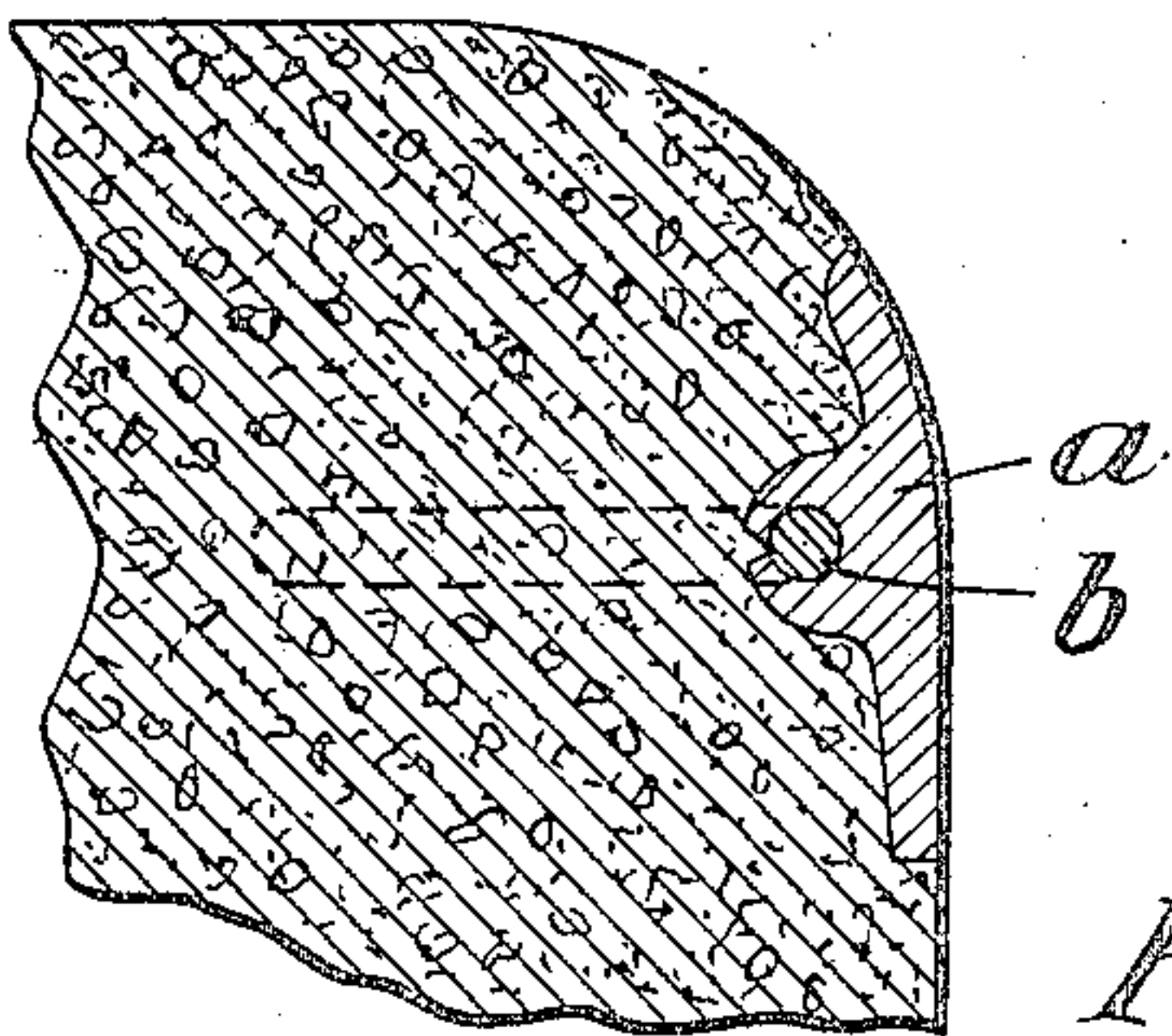


Fig. 3.

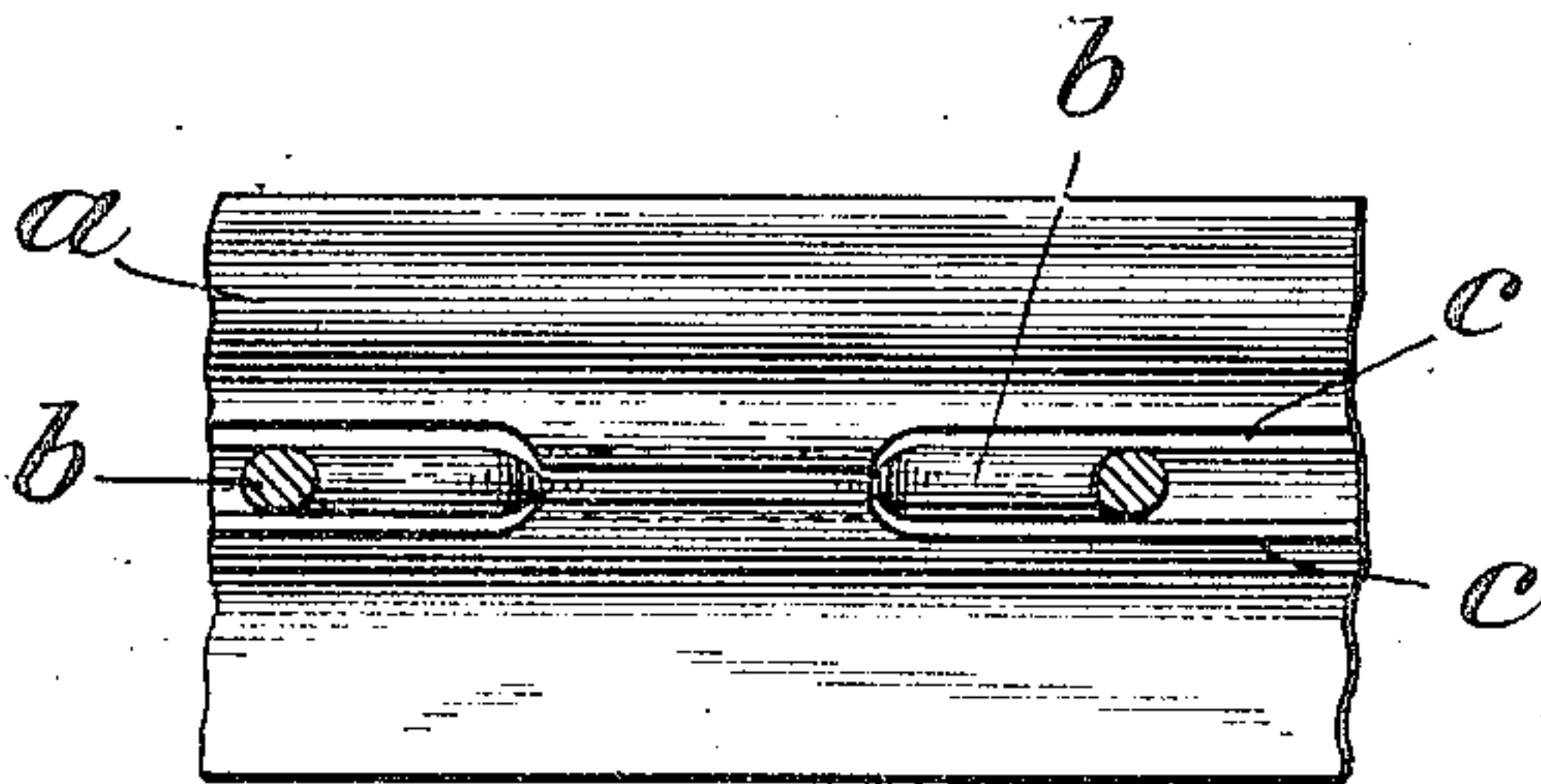


Fig. 4.

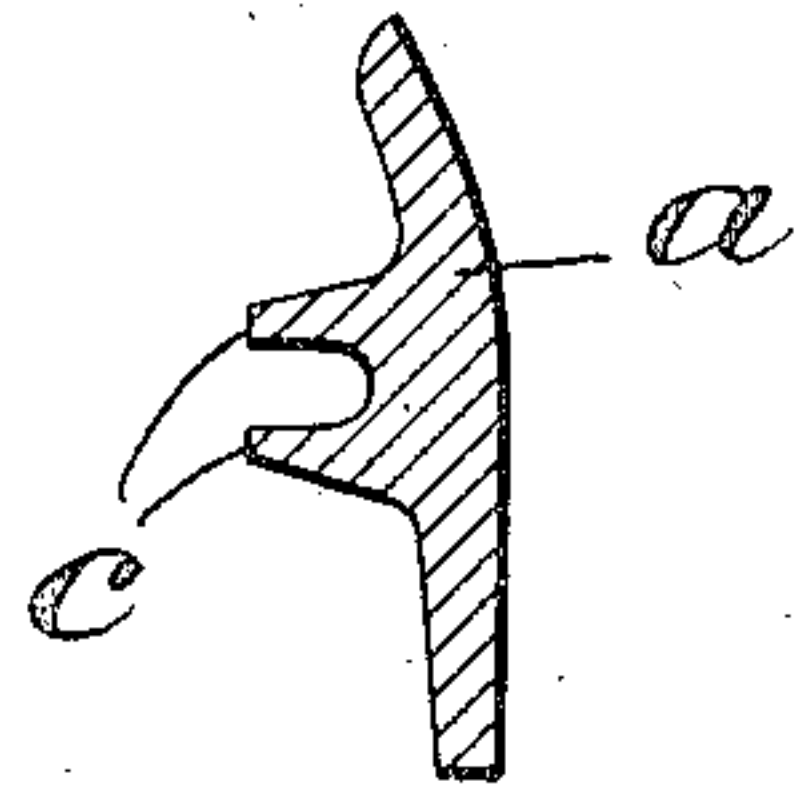


Fig. 6.

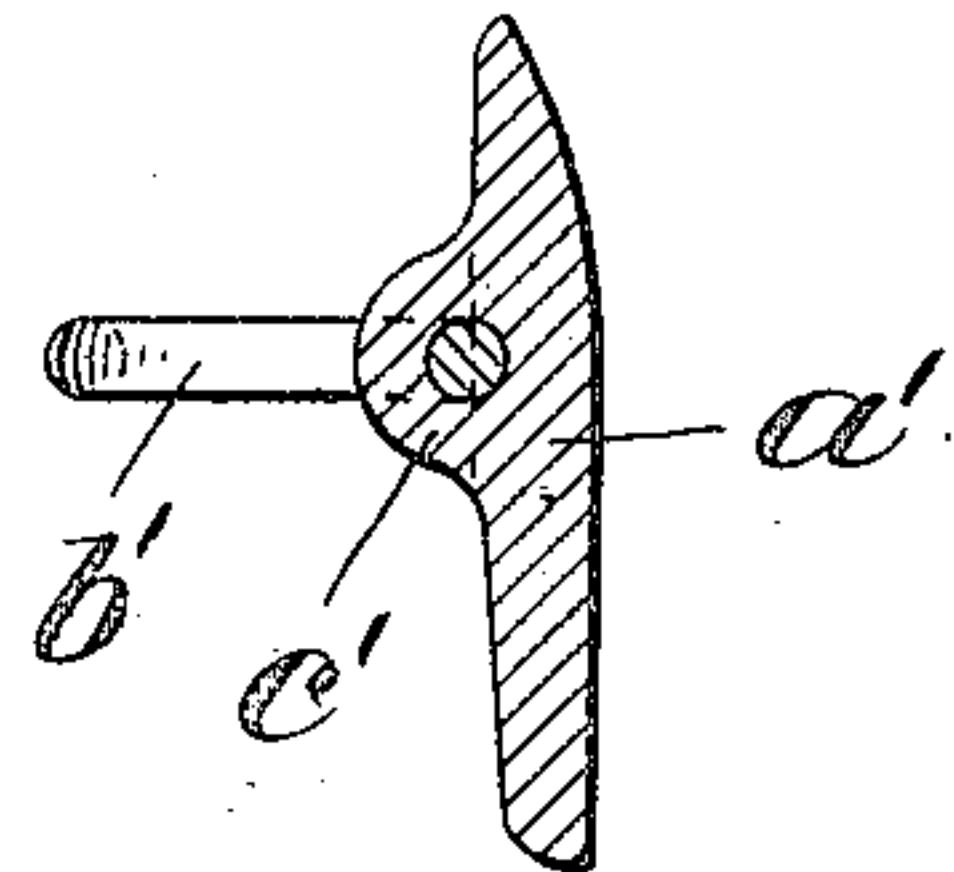


Fig. 2.

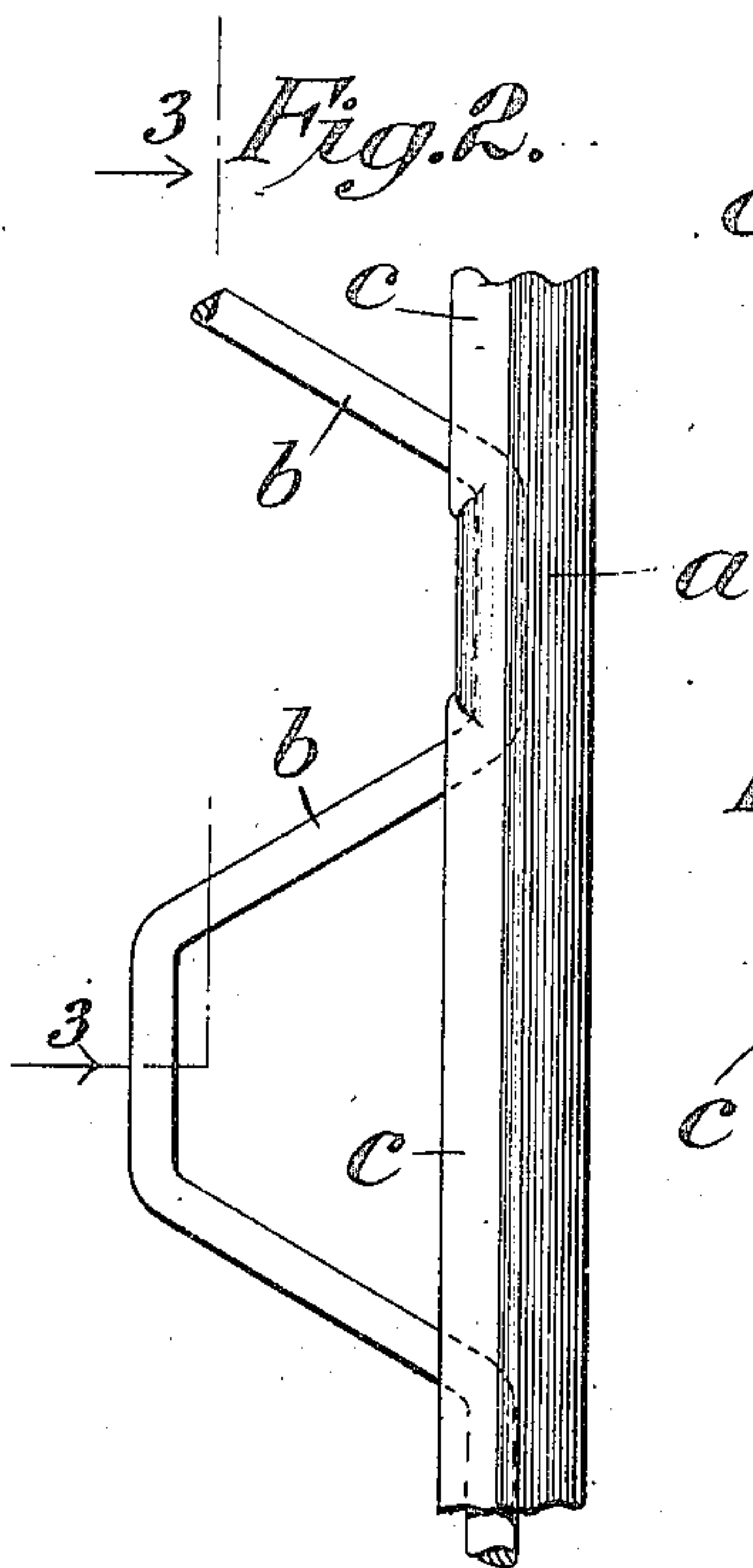


Fig. 5.

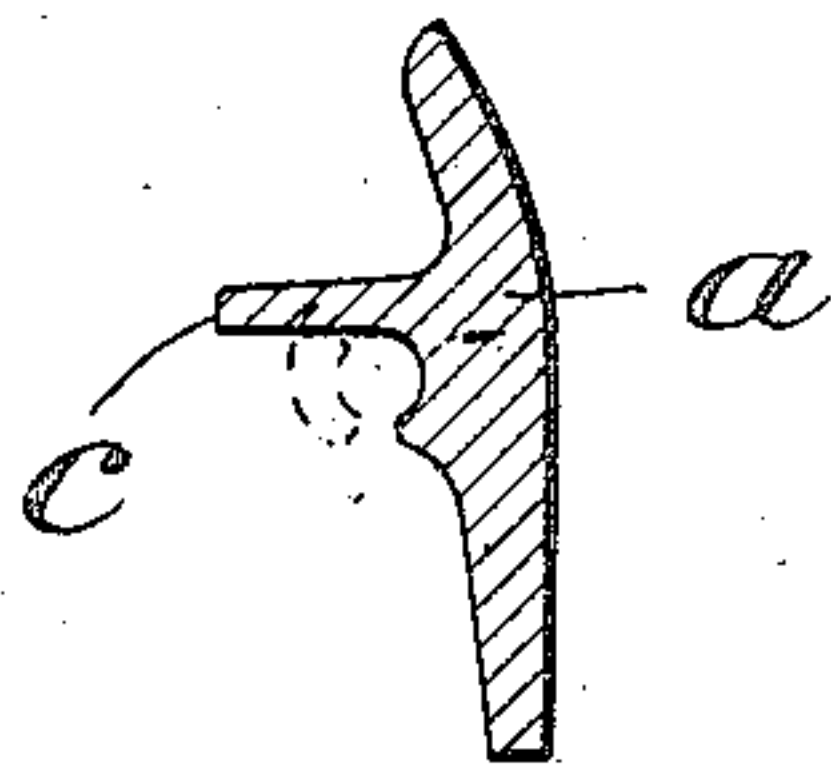
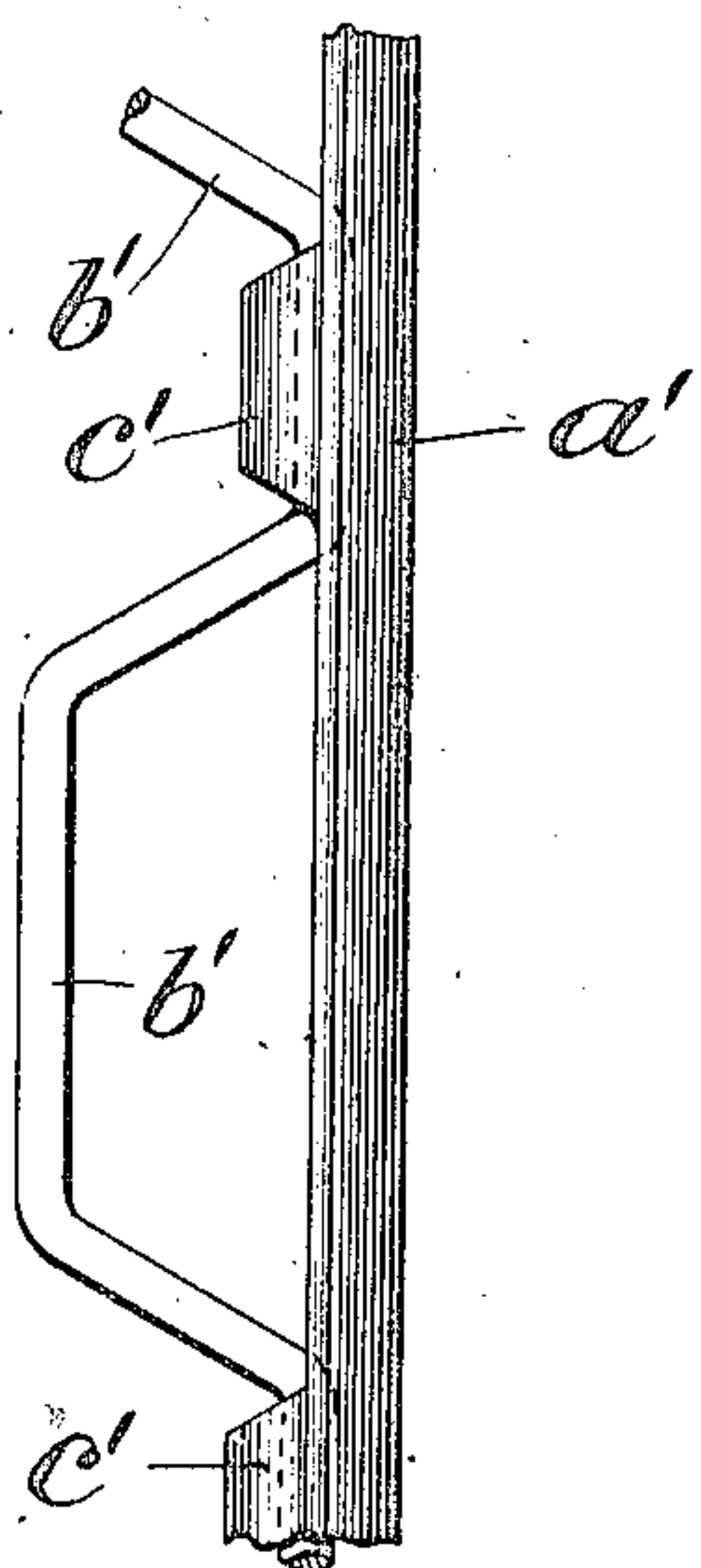


Fig. 7.



Attest:

Edgeworth Macneil
Elmer J. Kruger

Inventor:

by *Samuel Whinery*
Redding Kiddle & Greeley
Attys.

UNITED STATES PATENT OFFICE.

SAMUEL WHINERY, OF EAST ORANGE, NEW JERSEY.

CURB-PROTECTOR.

No. 875,025

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed April 16, 1907. Serial No. 368,576.

To all whom it may concern:

Be it known that I, SAMUEL WHINERY, a citizen of the United States, residing in East Orange, in the State of New Jersey, have invented certain new and useful Improvements in Curb-Protectors, of which the following is a specification, reference being had to the accompanying drawings, forming a part hereof.

In the present extensive use of hydraulic concrete for sidewalks and curbing the provision of some efficient protector of the face and corner of the curb from accidental injury and from shock and abrasion by the wheels of vehicles becomes important. Various forms of protectors have been devised, most of them comprising a metal facing with means of anchoring the facing or protector in place. The most common form consists of a wrought iron or cast iron bar or rail having a cross section similar to that known as a T shape, the stem of which projects into the body of the concrete, the adhesion between this stem and the concrete being depended upon to resist the detachment of the protector. Some of these devices have this stem provided with openings or projecting lugs or pins for better engagement with the concrete, but even when provided with these aids, the anchorage of the protector in the concrete is often insufficient to hold it firmly in place. Moreover, it is found in practice that when the protector is made of cast iron, the unequal rate of cooling and consequent unequal contraction of the head and the stem of such a section causes it to assume a bent or distorted form; and if the protector be rolled from wrought iron or steel, the punching of holes in the stem of the section is likely, by the unequal stretching of the metal in the head and in the stem, to produce a permanent distortion of the protector. In either case this distortion is difficult and expensive to remedy. Moreover, it is difficult and expensive to bend and fit such a section to curved parts of the curbing, as at street corners. Also the projecting stem or anchorage of such sections, even if perforated, makes it difficult to properly tamp the concrete under and around it, or to do this without disturbing the position of the protector.

The object of my invention is to produce a curb protector which shall not only furnish a more secure anchorage in the concrete, but shall overcome or avoid the defects and difficulties pointed out, and shall at the same

time be more easily placed in position and less expensive than protectors heretofore devised.

In accordance with the invention the face plate is formed without a broad flange or stem and the anchoring device consists of a wire or rod or a flat strip of metal bent to form suitable loops, permanently secured to the face plate at intervals.

The invention will be more fully described hereinafter with reference to the accompanying drawings in which it is illustrated and in which:

Figure 1 is a view in vertical transverse section of a concrete curb with one form of the improved protector in place. Fig. 2 is a plan view of a portion of the improved protector. Fig. 3 is a view of the inner side of the face plate, a portion of the anchoring device being shown. Fig. 4 is a view in transverse section of the face plate without the anchoring device. Fig. 5 is a view similar to Fig. 4 but showing a variation in form. Figs. 6 and 7 are views in transverse section and in plan of a cast face plate with its anchoring device.

The improved protector consists of a face plate or member *a* and an anchoring member *b*. The face plate or member *a*, as shown in Figs. 1-5, is preferably rolled, having a suitable profile and capable of being bent or curved either at the factory or on the street where used to conform to the desired line of the curbing. It is rolled with a lip or lips *c* on its face, and is produced in lengths convenient for handling, say from five to ten feet long. The anchoring member *b* is a rod or wire or strip of flat metal which is bent to form open loops of suitable shape, as shown in Fig. 2, and to be permanently engaged with the face plate or member at intervals between the loops by pinching or bending the lip or lips *c* upon it, as shown in Figs. 1, 2 and 3. Preferably each section of the protector is completed at the factory, being sent out straight for all ordinary work or specially formed to suit curves of short radius. The straight sections can be sent easily on the job to conform to departures of the curb from a straight line, the loops of the anchoring member being distorted readily to accommodate the bending of the face member.

In the construction of the curb the protector is set in its proper position, the face plate resting against the form used for shaping the face of the curb, where it is

secured by suitable clamping devices, and the concrete is then shoveled into place. The form and section of the anchoring piece offers little resistance to the placing of the concrete, which readily falls or flows around it, and the concrete may, with reasonable care, be properly tamped in the usual manner without disturbing the protector. It will be observed, moreover, that the form and character of the anchoring device employed secures effective contact with the concrete and maximum resistance to the displacement or movement of the protector.

The improved protector is capable of being produced by casting if a cast protector is preferred. As shown in Figs. 6 and 7 the anchoring wire *b'* is secured to the face member *a'* by casting the latter about the adjacent portions of the loops of the wire *b'*, as at *c'*. In this construction no lips are formed on the inner face of the face member, but only the projections *c'* which are cast about the wire *b'*.

It will be understood that various changes in details of form and construction can be made to suit different conditions of use without departing from the spirit of the invention.

I claim as my invention,—

1. A concrete curb protector comprising a metal face plate and a continuous rod or wire anchoring member bent to form open loops and permanently secured to the face plate at intervals between the loops.

2. A concrete curb protector comprising a metal face plate provided with a lip on its inner face and a continuous rod or wire anchoring member bent to form open loops and permanently engaged at intervals by the lip of the face plate between the loops.

This specification signed and witnessed this tenth day of April, A. D. 1907.

SAMUEL WHINERY.

Signed in the presence of—

ALBERT A. CARY,
E. M. HOLT.