

J. Longking,

Photographic Plate-Holder.

N^o 16,689.

Patented Feb. 24, 1857.

Fig. 2.

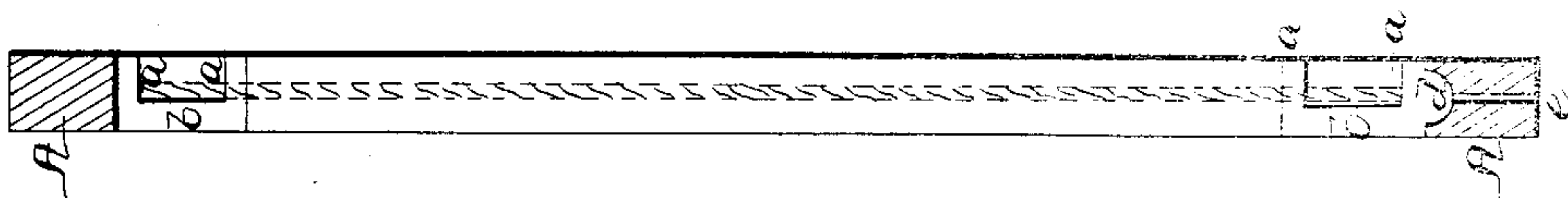
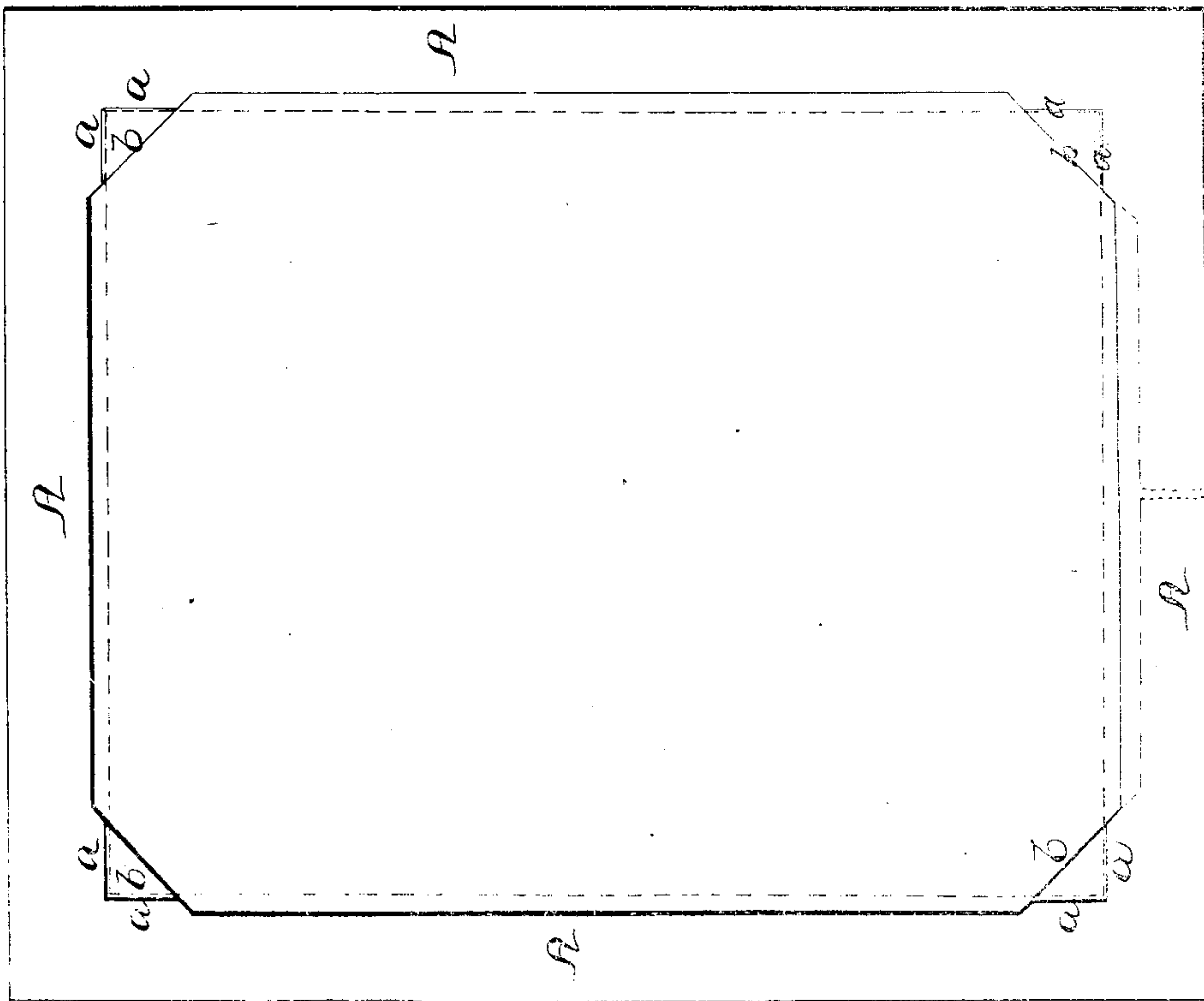


Fig. 1.



UNITED STATES PATENT OFFICE.

JOSEPH LONGKING, OF NEWBURGH, NEW YORK.

PHOTOGRAPHIC-GLASS HOLDER.

Specification of Letters Patent No. 16,689, dated February 24, 1857.

To all whom it may concern:

Be it known that I, JOSEPH LONGKING, of the township of New Windsor, (Newburgh post-office,) in the county of Orange and State of New York, have invented a new and useful Improvement in Glass-Holders for Photographing, the same constituting a new article of manufacture; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, is a front view of one of my improved holders having a glass shown within it in red outline. Fig. 2, is a section of the same.

Similar letters of reference indicate corresponding parts in both figures.

The holders heretofore used to contain the glass in the camera during the process of taking photographic impressions have been constructed of wood, but in order to prevent the chemicals used in the process from being injuriously affected by their action on the wood, the holders have been fitted with glass corner pieces. Holders with glass corner pieces, however, soon become worthless owing to the destruction, by the acid, or chemicals, of the cement by which the corner pieces have been secured and of the surrounding portion of the wood and the falling out of the corner pieces.

My invention consists of a new article of manufacture, viz., a photograph holder, composed of antimony, tin, and lead, alloyed in the proportions hereinafter described.

My improved holder is in form substantially like those heretofore used, consisting simply of a frame, A, A. The flanged angular recesses are of the same form as the interior of the glass corner pieces commonly used; *a, a*, are the angular sides of these recesses which support the edges of the glass B, and confine it edgewise, and *b*, are the flanges at the backs of the said recesses which serve as resting places for the glass to hold it upright when in the camera box. These frames are cast with their recesses, *a, a, b*, by the ordinary mode of casting metals, and after casting only require to be faced up flat and squared on their exterior.

In order to collect any acid or chemicals dripping from the plate, I make a gutter in the bottom side as shown at *d*, Fig. 2, and make a hole *e*, in the gutter for the escape of

the acid or chemicals from the gutter to a sponge or other receptacle placed below.

The metal which I propose to use for the holders partakes of the character of what is known as stereotype metal being an alloy of lead, tin and antimony; but in order to make it less brittle and give it greater tenacity, I employ rather less antimony and lead and rather more tin than are used in stereotype metal, the proportions being 75 parts by weight of lead, 10 parts of tin, and 15 parts of antimony, but these proportions may be to some extent varied without materially deteriorating from the quality of the alloy. An alloy of this character is but little affected by the acid or chemicals employed and does not injuriously affect the chemicals.

My improvement possesses the virtue of preventing the streaking of the plate, and thus enables the operator to produce a better picture than can be obtained when other holders are employed.

All photograph holders heretofore employed are, to the best of my knowledge and belief, made of wood, with (when used to take pictures on glass) silver points or glass corners fastened to the wood, on which to rest the glass that receives the picture. The reason for the employment of these points or corners is to insulate the glass; as the proper action of the chemicals upon the glass is interfered with, or prevented, if the glass comes in actual contact with the wooden frame. But these chemicals very soon destroy the silver points, or the fastenings of the glass, whether they be screws, as in Lewis's frame, patented Oct. 1856, or cement, as in others; and the glass corner tumbles out. But not only so, the wooden frame itself is soon rendered unserviceable by the action of the chemicals; as the nitric acid &c., opens its joints, and it soon falls to pieces. I have frequently known this to be the case, after a very few days use. Now, I do not suppose my own frame to be indestructible. But I do know, from actual tests, that the chemicals have so little effect upon it, that it will take a long time to destroy it, or even seriously to affect it. Aside from this, I assert that my holder is the only holder ever invented, to the best of my knowledge and belief, with the corner being a component part of that holder; not affixed, but an integral portion of the holder itself. But not only is my holder less sub-

ject to destruction, and consequently cheaper and better, pecuniarily, but it also does its work in a manner superior to that of any other holder hitherto made.

5 I do not claim any special arrangement of gutters. Neither do I claim anything relating to photograph holders heretofore known. Neither do I claim, broadly, the making of metallic alloys, out of lead, tin, and anti-
10 mony. Neither do I claim broadly the substitution of one material for another. But, to the best of my knowledge, the photograph holder invented by me is a new article of

manufacture, and exhibits properties and virtues which no other holder heretofore 15 known presents.

Therefore, I claim, and desire to secure by Letters Patent, as a New Article of Manufacture—

A photograph holder composed of anti- 20 mony, tin, and lead, alloyed in the proportions substantially as herein set forth.

JOSEPH LONGKING.

Witnesses:

JAMES F. BUCKLEY,
W. TUSCH.