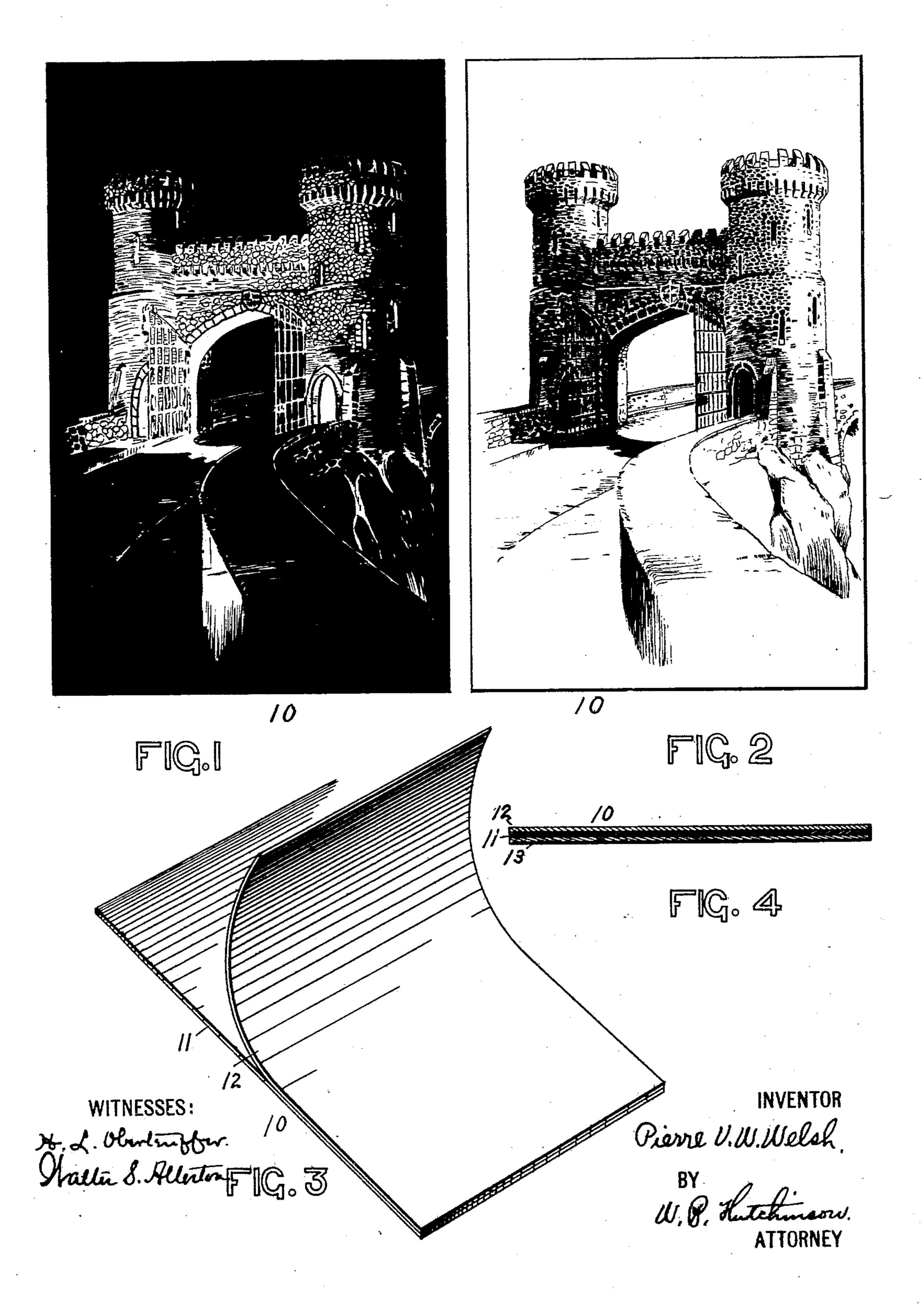
No. 677,484.

P. V. W. WELSH. PHOTOGRAPH PLATE.

(Application filed Dec. 4, 1900.)

(No Model.)



United States Patent Office.

PIERRE V. W. WELSH, OF NEW YORK, N. Y.

PHOTOGRAPH-PLATE.

SPECIFICATION forming part of Letters Patent No. 677,484, dated July 2, 1901.

Application filed December 4, 1900. Serial No. 38,616. (No model.)

To all whom it may concern:

Be it known that I, PIERRE V. W. WELSH, of New York, Kings county, New York, have invented certain new and useful Improvements in Photograph-Plates, of which the following is a full, clear, and exact description.

My invention relates to improvements in photograph-plates; and the object of my invention is to produce a cheap and rigid photograph-plate which can be used in any ordinary camera or photograph-machine and then developed and placed in an album, frame, or other receptacle without mounting, and also to produce a plate of this kind which is waterproof and from which the hypo can be easily and quickly removed.

My invention is intended, further, to produce a photograph-plate on which the same results can be had as with the ordinary photograph or sensitive paper and a card-mount-

ing.

My invention is still further intended to produce the handsome effect of the ordinary photograph when mounted on celluloid or ivory.

With these ends in view my invention consists of a photograph-plate, the construction of which will be hereinafter described and

claimed.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar figures of reference refer to similar parts throughout the several views.

Figure 1 is a front elevation of my improved plate after use and when first developed to produce a negative. Fig. 2 is a similar view, but showing the plate after being washed and redeveloped to produce a positive. Fig. 3 is a perspective view of the plate with the paper coating turned up to show clearly the structure of the plate. Fig. 4 is a cross-section of the plate.

The plate 10 consists, preferably, of three parts—to wit, a backing or body portion 11, of sheet metal, preferably sheet-iron, a facing 12, of photograph-paper, and a backing 13, of japan, preferably white japan; but essentially the plate consists of the sheet metal 11 and the paper 12, which is cemented to the metal and which is of the same size. The

object of the japan coating 13 on the back is simply to add a finish to the plate when complete by concealing the metal and by giving to it an ivory or celluloid appearance.

In carrying out my invention a thin metal- 55 lic plate 11 is used and the waterproof paper 12 is cemented to it; but, if desired, ordinary paper may be cemented to it and then either waterproofed or waterproofed and colored by impregnation with a pigment at the same 60 time. After the paper is cemented to the plate it is treated with a coating of waterproof material, and if the paper is of poor quality the waterproof material is impregnated with a pigment—zinc oxid, for instance. 65 This gives the paper a fine grain with a celluloid appearance. After drying, the sheet metal with paper face is coated with any emulsion or material sensitive to light, this depending upon the purpose for which the 70 plate is to be used—for printing from a negative, a bromid emulsion, &c.

In using this plate a negative is laid on it in a printing-frame, an exposure of a few seconds to gas-light being sufficient, and then developed. As the emulsion cannot sink into the paper, the fixing is very rapid and the necessity of prolonged washing is avoided. The plate can be also used to produce positives direct by first exposing in camera, deso veloping, then eating away with any chemical that will attack the developed image—potassium permanganate, for instance—washing, briefly exposing to light, and redeveloping. In this case no fixing is necessary.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

As an improved article of manufacture, a photograph-plate comprising a sheet-metal 90

body, and a facing of waterproof paper cemented to the body.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

PIERRE V. W. WELSH.

Witnesses:
THERON DAVIS,
W. B. HUTCHINSON.