

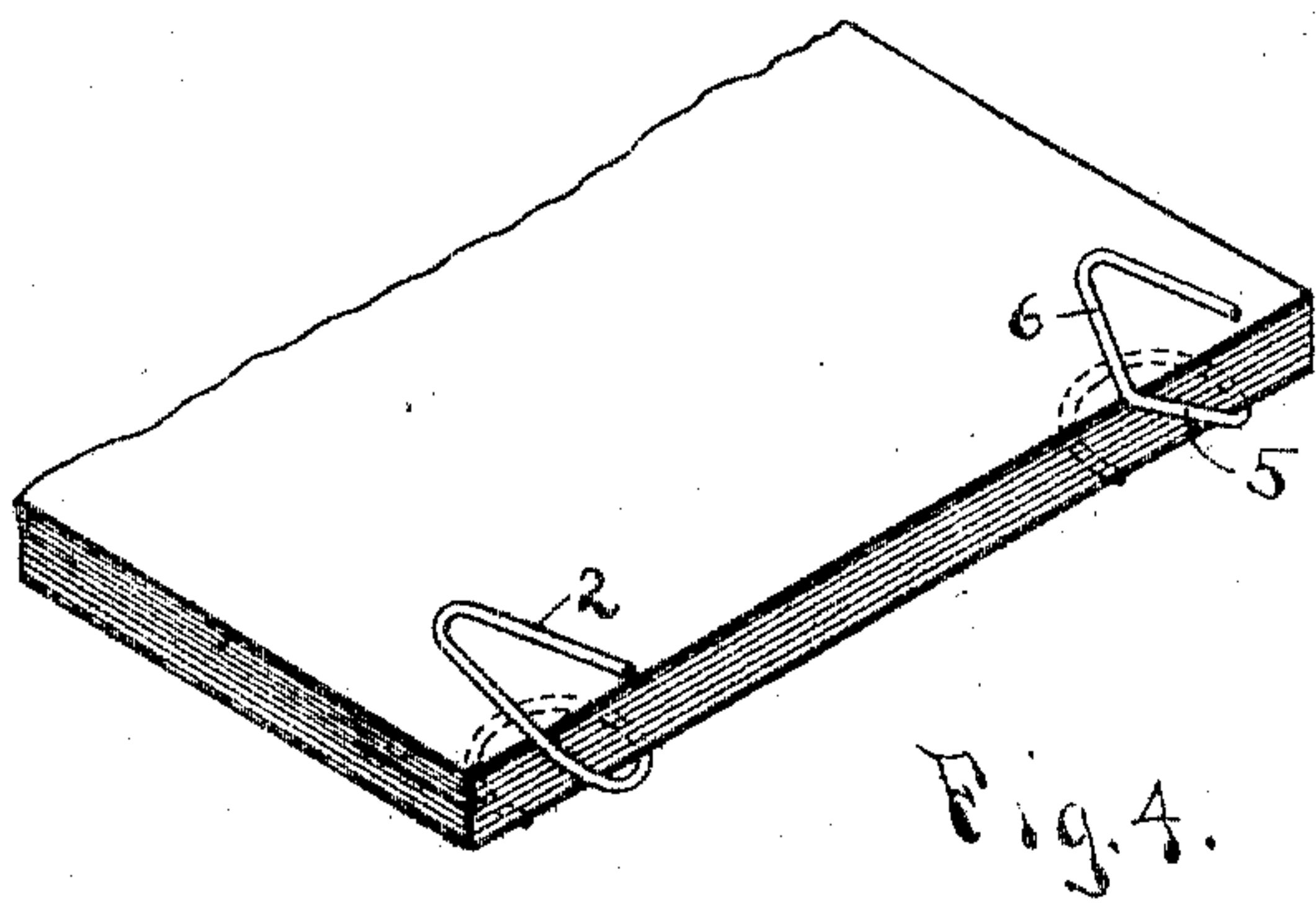
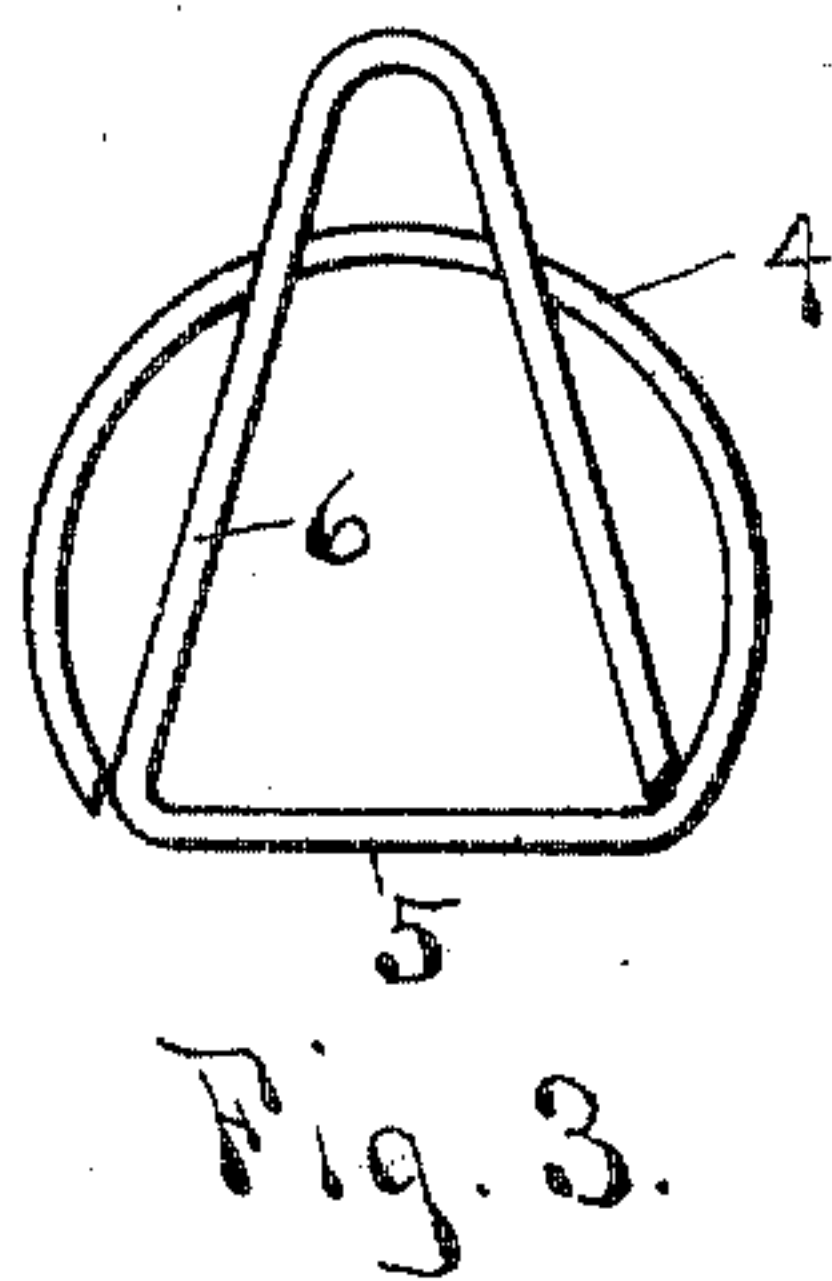
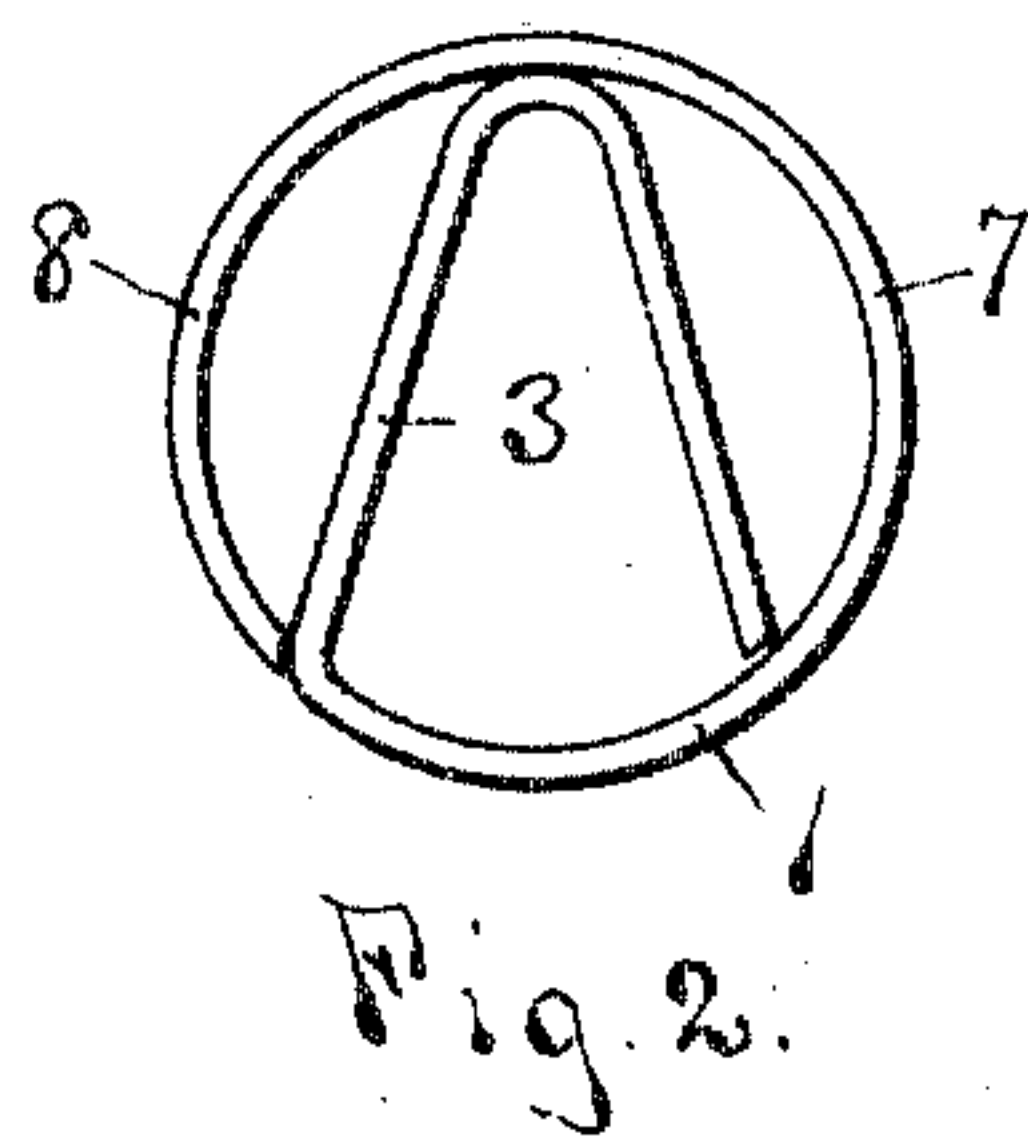
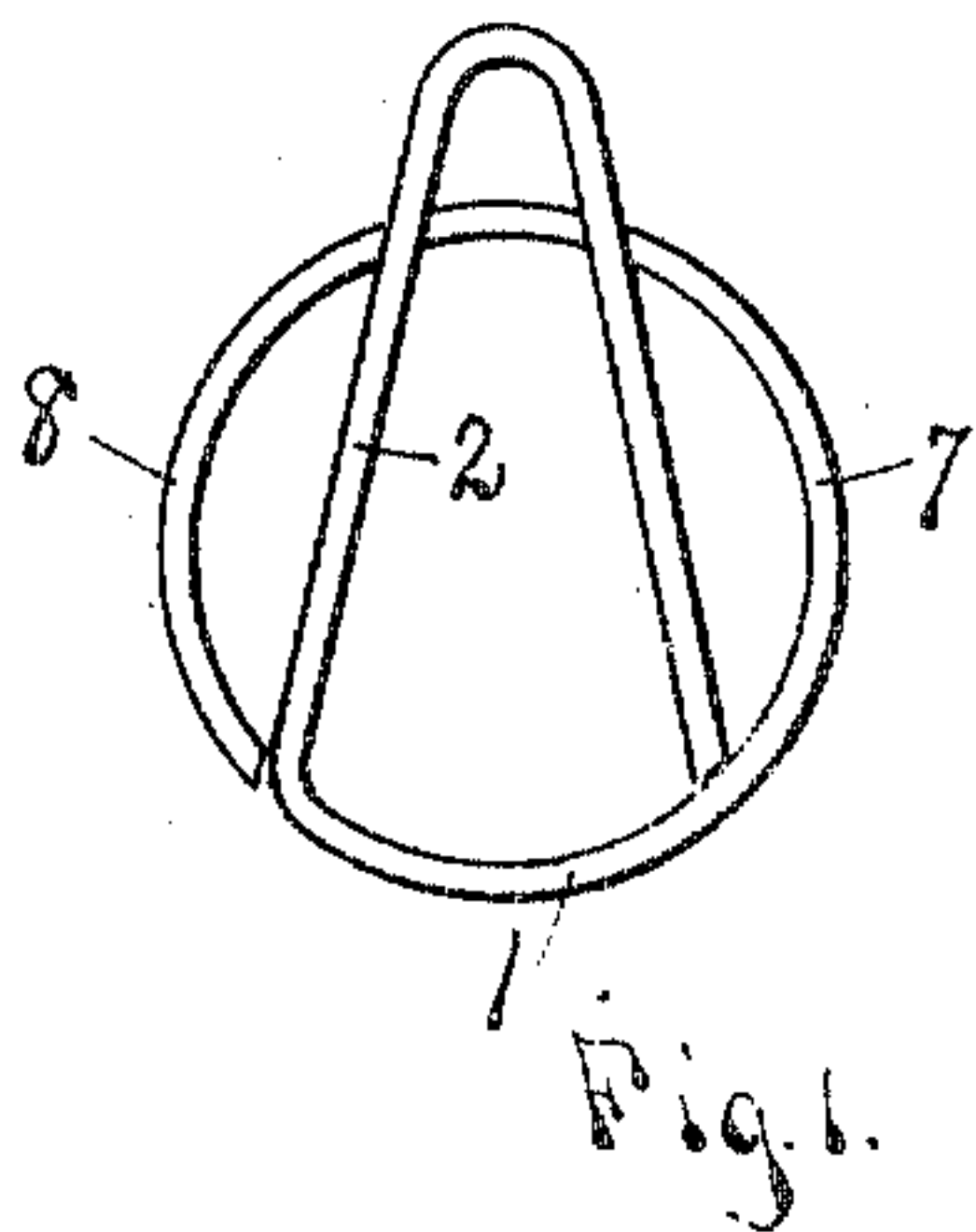
No. 776,974.

PATENTED DEC. 6, 1904.

F. R. WELTON.
PAPER CLIP.

APPLICATION FILED JULY 16, 1904.

NO MODEL.



Witnesses:

Emma Petersen
A. H. Hiley

Inventor

By his Attorney

F. R. Welton
Edward M. Bagelsen

UNITED STATES PATENT OFFICE.

FRANK R. WELTON, OF DETROIT, MICHIGAN, ASSIGNOR TO THE BOOK-KEEPER PUBLISHING CO., LIMITED, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

PAPER-CLIP.

SPECIFICATION forming part of Letters Patent No. 776,974, dated December 6, 1904.

Application filed July 16, 1904. Serial No. 216,868. (No model.)

To all whom it may concern:

Be it known that I, FRANK R. WELTON, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented a new and Improved Paper-Clip, of which the following is a specification.

This invention relates to an improved clip or binder for fastening together sheets of paper or similar material, the objects being to provide a novel and effective spring-clip made of a single piece of suitable spring-wire, which may be rapidly and cheaply made in large quantities and which shall in a thoroughly practical manner firmly secure together papers and other like articles and also permit their disengagement when desired without danger of tearing or other injury. I attain these objects by the construction shown in the accompanying drawings, in which—

Figure 1 is a view of the preferred form of my spring-clip. Figs. 2 and 3 are views of modifications. Fig. 4 is a view of leaves of paper secured together at one edge by the clips shown in Figs. 1 and 3.

Similar reference characters refer to like parts throughout the several views.

In the drawings the clips are shown to be composed of a single piece of spring-wire, the body portion of the clip being of circular or nearly circular form. To this body a tongue is attached which extends across the loop and which tongue may be bent away from the body portion to admit the leaves that the clip is intended to hold together.

The clip shown in Fig. 1 has a circular body portion 1 and a V-shaped tongue 2, the outer part of which rests on the body portion. The modification shown in Fig. 2 is composed of the same circular body 1 and a somewhat shorter tongue 3, that will lie in the plane of the body. The clip shown in Fig. 3 differs from that in Fig. 1 in that the body portion 4 has a flat portion 5, the tongue 6 being similar to that in Fig. 1. This clip shown in Fig. 3 is preferable where papers of considerable thickness are to be secured together, as the straight part 5 will fit snugly against the edge of the leaves, as shown in Fig. 4.

The clip is formed by bending the wire into a complete loop, either entirely circular or with a straight portion. The wire is then deflected to extend across the loop and is again bent to form a triangular tongue, the free side of the triangle terminating just inside the loop.

In placing the fastener in engaging position the tongue is pressed away from the body portion by the thumb, the parts 7 and 8 being held back by the first and second fingers. Into the space thus formed between the tongue and body sheets of paper may be inserted. It will be noticed that the greater part of the body portion and all of the tongue will bear against the leaves to hold them together, and from the length of wire in contact with the paper the friction between the leaves and between the leaves and the clip will be the maximum for the pressure exerted.

Having now described my improved spring-clip, what I claim as my invention, and desire to secure by Letters Patent, is—

1. A clip or paper-fastener, formed of a single piece of wire, having a body part composed of a complete loop, and a tongue formed by an end portion of said wire being deflected inward from one end of said loop and then bent back to form a tongue, the sides of said tongue diverging from its point, the sides of said loop forming circular arcs and projecting beyond the sides of the tongue.

2. A clip or paper-fastener, constructed of a single length of wire to form a complete loop, with an end portion of said wire deflected inward to cross said loop and then bent back to again cross said loop, forming a tongue, the base of said tongue being a portion of said loop, the sides of said loop forming arcs and projecting beyond the sides of the tongue.

In testimony of which I have signed this specification in the presence of two subscribing witnesses.

FRANK R. WELTON.

In presence of—

EDWARD N. PAGELSEN,
EMMA PETERSEN.