

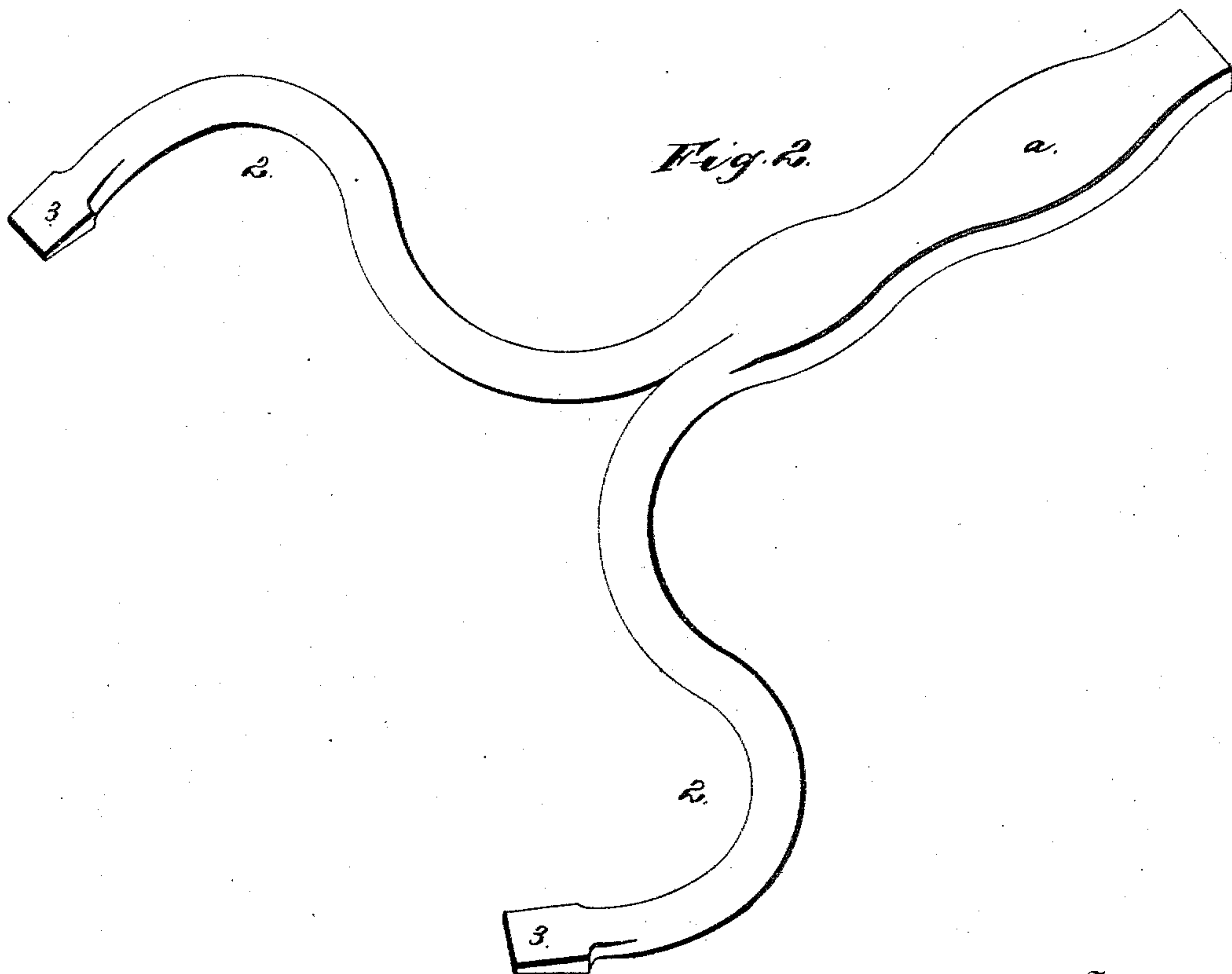
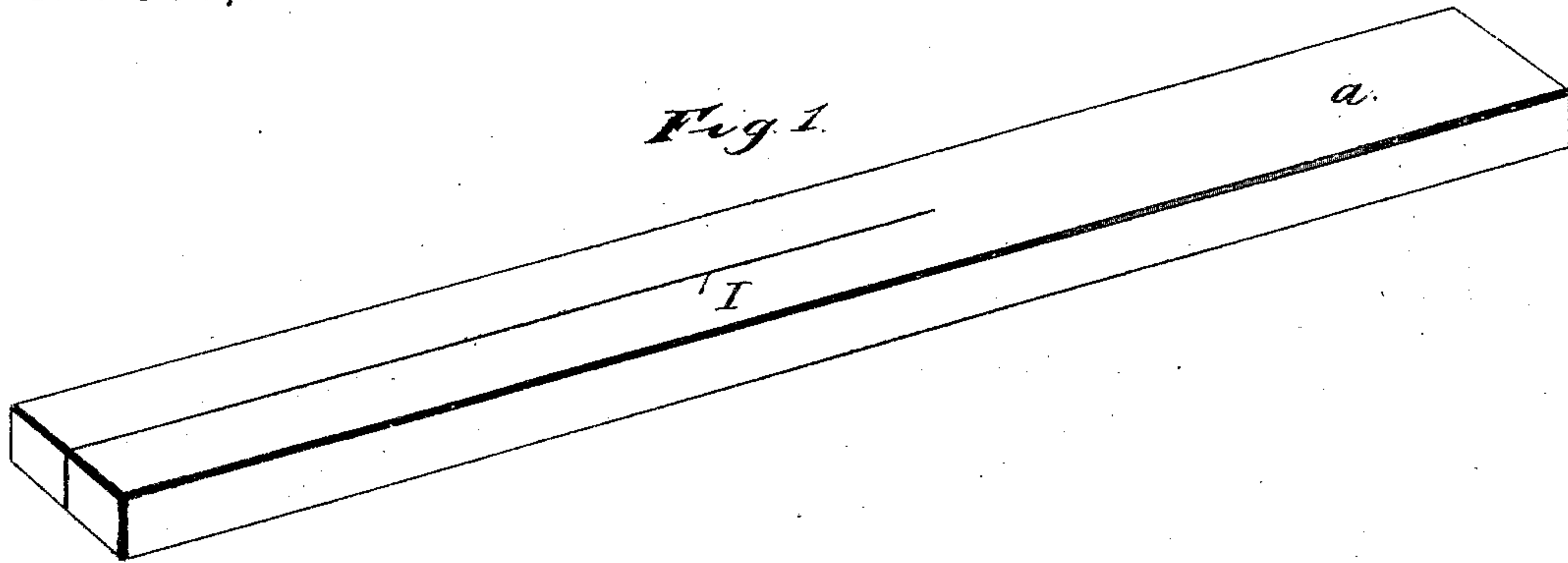
(No Model.)

F. S. RYAN & E. B. KNAPP.

BRIDLE WINKER STAY.

No. 369,367.

Patented Sept. 6, 1887.



Witnesses

*Geo. Thayer*

*Edw. H. H. H.*

Inventors

*E. B. Knapp*  
*F. S. Ryan*

By *their* Attorneys.

*C. A. Howells*

# UNITED STATES PATENT OFFICE.

FRANK S. RYAN AND EDMOND B. KNAPP, OF SAN JACINTO, CALIFORNIA.

## BRIDLE-WINKER STAY.

SPECIFICATION forming part of Letters Patent No. 369,367, dated September 6, 1887.

Application filed June 28, 1887. Serial No. 242,787. (No model.)

*To all whom it may concern:*

Be it known that we, FRANK S. RYAN and EDMOND B. KNAPP, citizens of the United States, residing at San Jacinto, in the county of San Diego and State of California, have invented a new and useful Improvement in Winker-Forks, of which the following is a specification.

Our invention relates to an improvement in winker-forks; and it consists in the method of forming the same, which will be more fully hereinafter described, and pointed out in the claim.

The object of our invention is to provide a seamless winker-fork which is formed from a single piece of leather and constructed in the shape herein set forth by means of pressure applied thereto, having been previously saturated with a compound which colors and at the same time stiffens the fork and retains it in the desired form. We attain this object by the construction illustrated in the accompanying drawings, together with the method for producing the fork, and in said drawings—

Figure 1 represents a piece of leather from which our improved fork is formed. Fig. 2 is a detail perspective view of the fork when completed.

In carrying out our improved method we first take a piece of leather of suitable thickness and divide one end thereof by means of a knife-cut, 1. The leather as thus treated, as fully shown in Fig. 1, consists of a rectangular piece of material of equal thickness throughout. The said leather strip is then trimmed or cut down to form the attaching portion *a*, which is secured to the head-strap, as will be readily understood. The forks 2 2 are then slightly shaped or trimmed to the desirable thickness, having the reduced ends 3 3 for attachment to the winkers. The piece of leather having been thus formed, is then saturated with a solution or compound of logwood, cop-

peras, vinegar, and paraffine-oil or dry linseed-oil. Before the leather is placed in the solution just described it is placed in water, for purposes which will be readily understood. The leather having been immersed in the solution or compound above set forth, it is colored thereby, and when thus treated it is placed in a suitable press or former.

By the immersion in the water and the solution or compound the prepared strip of leather is rendered exceedingly soft and pliable, and when it is placed in the pressure-machine or former it is compressed with such force that it readily assumes the shape of the die and forms the rounded parts, making a neat and substantial winker-fork very much cheaper than can be made by hand.

Any suitable pressure-machine or former may be used for shaping the fork, as shown in Fig. 2.

The novelty and utility of our improved method being obviously apparent and appreciable, it is unnecessary to further enlarge upon the same herein.

Having thus described our invention, what we claim is—

The herein-described method of forming winker-forks, which consists in slitting one end of a regularly-formed piece of leather, saturating the same in water and the solution set forth to render it pliable, and then compressing the said piece of leather in a suitable former to produce the rounds of the fork, as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

FRANK S. RYAN.  
EDMOND B. KNAPP.

Witnesses:

JOHN W. HUDSON,  
JOSEPH P. KERR.