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Patented Aug. 19, 1902.

J. C. & W. J. POPE.

METHOD OF FORMING JOINTS FOR INTERSECTING WIRES OR RODS.

(Application filed Feb. 8, 1901.)

(No Model.)

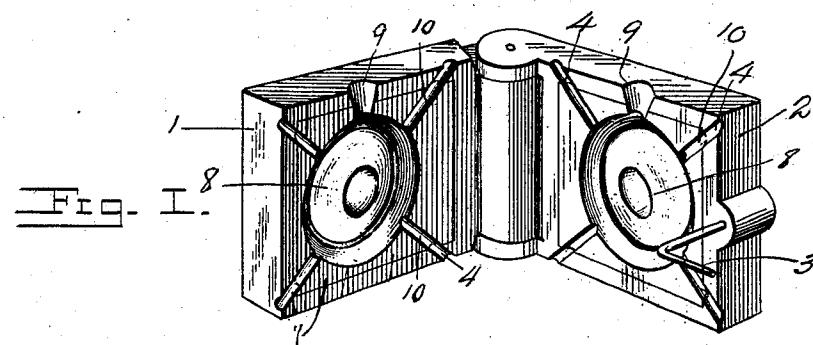


Fig. 1.

Fig. 2.

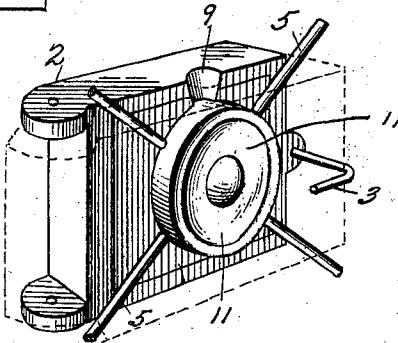
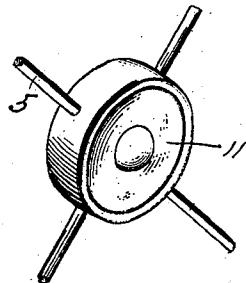
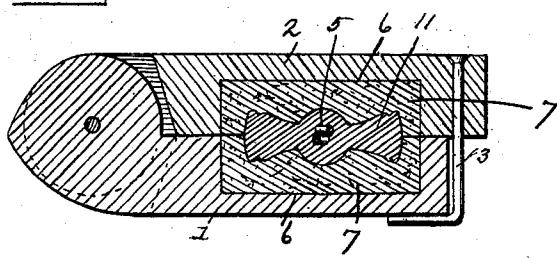


Fig. 3.



Witnesses

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# UNITED STATES PATENT OFFICE.

JOHN C. POPE AND WILLIE J. POPE, OF PLANO, ILLINOIS.

## METHOD OF FORMING JOINTS FOR INTERSECTING WIRES OR RODS.

SPECIFICATION forming part of Letters Patent No. 707,352, dated August 19, 1902.

Application filed February 8, 1901. Serial No. 46,548. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN C. POPE and WILLIE J. POPE, citizens of the United States, residing at Plano, in the county of Kendall and State of Illinois, have invented a new and useful Method of Forming Joints for Intersecting Wires or Rods, of which the following is a specification.

This invention relates to a method of forming joints for intersecting wires, rods, and other like members in the course of building fences, fence fabrics, gates, and analogous structures; and the object in view is to provide a superior joint which can be quickly formed and which will be efficient and durable in use.

With these and other objects in view, as will appear as the nature of the invention is better understood, the same resides in the method of casting joints and immediately using the flask for further casting, which consists in disposing the elements to be joined within a flask inclosing a removable chill, flowing molten metal within the chill and around the said elements, removing the flask from the chill, and then supplying it with another chill and repeating the operation.

The invention consists, further, in the novel steps of the procedure, as will be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like numerals of reference indicate corresponding parts, there is illustrated a combined flask and chill adapted for carrying the procedure into effect, it being understood that the invention is not to be limited to the precise form of apparatus illustrated, and in these drawings—

Figure 1 is a view in perspective of a combined flask and chill, the parts of the flask being open. Fig. 2 is a similar view showing one-half of a combined flask and chill in dotted lines and exhibiting a finished joint. Fig. 3 is a vertical longitudinal section through the flask and chill and showing the joint *in situ*. Fig. 4 is a detail view in perspective of a completed joint.

In carrying the invention into effect a two-part mold is employed comprising two members 1 and 2, suitably connected, as by a pivot, one of the members carrying a revolute clamp or catch 3 to engage the other member

to hold the parts closed and firmly secured upon the intersecting wires to be joined. The opposed faces of the flask members are provided at their corners with diagonally-disposed grooves 4, adapted when the members are closed to register and to be engaged by the wires or rods 5 to be united. Each fastening member is provided with a cavity 6, in this instance shown rectangular, in which are placed the chill members 7, the opposed faces of which lie flush with those of the flask-sections and are provided with depressions 8, bearing the design of the rosette or joint to be cast around the intersecting wires 5. The chill, as usual, is made of metal and operates in the well-known manner quickly to cool the molten metal employed for the joint, thereby rendering it unnecessary to leave the flask positioned upon the wires for any length of time, whereby the formation of the joints will be facilitated. Each flask-section and each chill-section is provided with a gate 9, through which the molten metal enters the chill and incloses the intersecting wires. The chill-sections are also provided with diagonally-disposed grooves 10, which align with those of the flask members, and thereby operate firmly to hold the flask associated with the wires.

The manner of carrying the method into effect will be obvious. The flask being clamped around the intersecting wires or rods, as shown in Fig. 2, molten metal is poured into the gate and enters the chill, inclosing the intersecting portions of the wires by a button or rosette 11 of any desired exterior ornamentation. As soon as the molten metal contacts with the faces of the chill it is immediately cooled, and the flask may then be removed, dipped in water, if necessary, and then positioned on other intersecting wires.

The advantage arising from the employment of a flask provided with a chill in the manufacture of fences, gates, and the like is that the formation of the joints is facilitated and time is saved in the procedure. Of course it will be understood that a number of these chill-carrying flasks may be provided, so that as soon as one has been used and removed it may be laid aside and allowed to cool while another is employed.

Another and salient advantage accruing

from the form of flask described is that the joints of intersecting wires forming close meshes can be rapidly formed, for the reason that after a joint is cast the flask may be removed, leaving only a small chill on the joint, which will not interfere with the casting of an adjacent joint, whereas if the flask were of the ordinary character time would be wasted in waiting for one joint to cool before another one is formed, for the reason that two or more flasks could not be secured to the wires of one mesh at the same time.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The herein - described method of casting

joints and immediately using the flask for further casting, which consists in disposing the elements to be joined within a flask inclosing a removable chill, flowing molten metal within the chill and around the said elements, removing the flask from the chill and then supplying it with another chill and repeating the operation.

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

JOHN C. POPE.  
WILLIE J. POPE.

Witnesses:

A. T. SALTZGIVER,  
B. HARP.