

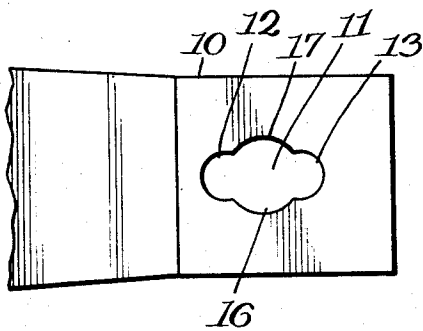
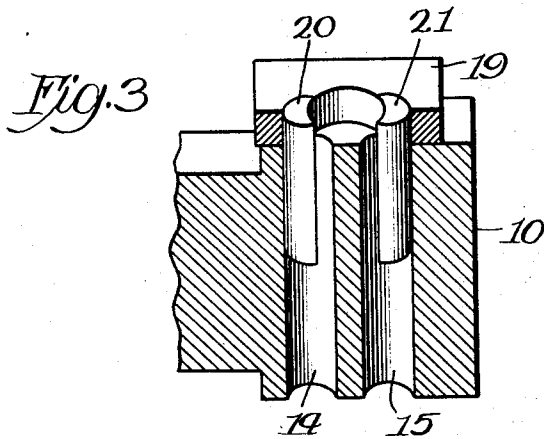
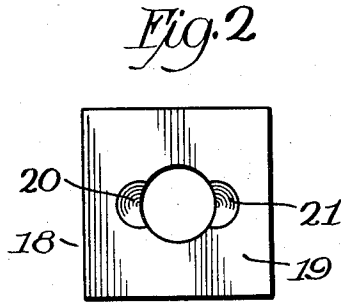
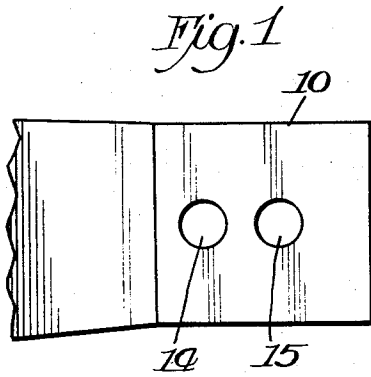
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C. J. NASH

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TEMPLATE FOR FORMING KEY OPENINGS IN RAILWAY DRAFT RIGGING

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Inventor
Charles J. Nash
By *Gilson, Mansel & Gays.*

UNITED STATES PATENT OFFICE

CHARLES J. NASH, OF CHICAGO, ILLINOIS, ASSIGNOR TO UNIVERSAL DRAFT GEAR ATTACHMENT CO., A CORPORATION OF ILLINOIS

TEMPLATE FOR FORMING KEY OPENINGS IN RAILWAY DRAFT RIGGING

Original application filed June 17, 1927, Serial No. 199,483. Divided and this application filed March 7, 1928. Serial No. 259,701.

This invention relates to the method of forming key-holes, and to the template employed in practicing the method.

The key-hole to the forming of which the invention is applicable has in transverse section the shape of an oblong slot with rounded ends, its side walls being channeled, the channels being arcuate and struck from the center of the slot.

This application is a division of my pending application, Serial No. 199,483 filed June 17, 1927.

In the accompanying drawings forming a part of this specification.

Fig. 1 is a detail, in plan, of the butt of a car coupler showing the completion of the first step in the improved method;

Fig. 2 is a plan view of the template;

Fig. 3 is a central, longitudinal, vertical section of the part shown in Fig. 1, with the template applied for the performance of the final step of the method; and

Fig. 4 is a view like Fig. 1 with the key hole completed.

The invention is illustrated in connection with a car coupler or drawbar 10 which is adapted to be attached to a coupler extension or yoke, not shown, by means of a key complementary in form to the key hole 11. In the practice of the improved method, the end portions 12, 13 of the key hole are first formed by passing a drill of suitable size through the coupler 10 to form a pair of suitable spaced parallel holes 14, 15. The stock intermediate of these holes is now removed by means of a drill of larger size than the drill used in forming these holes, thereby also forming the lateral channels 16, 17 the walls of which are curved being arcs struck from the center of the slot 11.

In the removal of the stock between the holes 14, 15, the template 18 is employed. This template consists of a plate 19, provided with an aperture of the size and shape of the keyhole to be formed. Within the end por-

tions of this aperture are fitted a pair of pins 20, 21, which may be either permanent or removable, secured to the plate, and projecting a substantial distance below it. The adjacent faces of these pins are grooved longitudinally, the grooves being concave and forming arcs struck from the center of the plate aperture. There is thus provided a central circular hole through the template of suitable size to receive the drill to be employed in completing the key hole.

The final steps in the improved method consist in fitting template pins in the holes 14, 15, and inserting a drill of the size corresponding to the remaining aperture in the template and passing the drill through the material operated upon, as the coupler butt 10, thereby removing the stock intermediate of the holes 14, 15 and completing the key hole.

It has heretofore been common practice in the railroad art to attach couplers, as 10, and their extensions by means of rivets extending through holes as 14, 15, the spacing of these holes being standardized. More recent practice provides for such attachment by means of a removable key. A large number of coupling devices of the former type are still in service and the present invention provides practical means for converting them to the improved practice.

In making such conversion, the holes 14, 15 are already provided. The rivets originally installed having been removed, the template is properly positioned by inserting the pins 20, 21 into these holes. The larger drill may be inserted through the plate 19, and will be guided by the pins, thus insuring a correctly formed key-hole.

I claim as my invention:

1. A templet comprising a plate having a slot therein, the ends of the slot being formed by segments of circular openings of the same diameter and its central portion by segments of a circle of larger diameter, pins secured

in the ends of said slot and extending outwardly from said plate, said pins having grooves for forming with the segments of said central portion a cylindrical opening.

5 2. A templet for guiding a drilling tool in the removal of the sceptum of material between closely adjacent previously formed holes, comprising an apertured plate and a pair of guide pins projecting from the face
10 of the plate, their outer faces conforming to and relatively spaced to engage the remoter sides of the holes, and their adjacent faces being concave and conforming to and being aligned with the walls of the plate aperture.

15 In testimony whereof I affix my signature.
CHARLES J. NASH.

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