No. 896,380. PATENTED AUG. 18, 1908.

W. HALES.

HINGE AND PIN CORNER FOR FOUNDRY FLASKS.

APPLICATION FILED APR. 20, 1908.

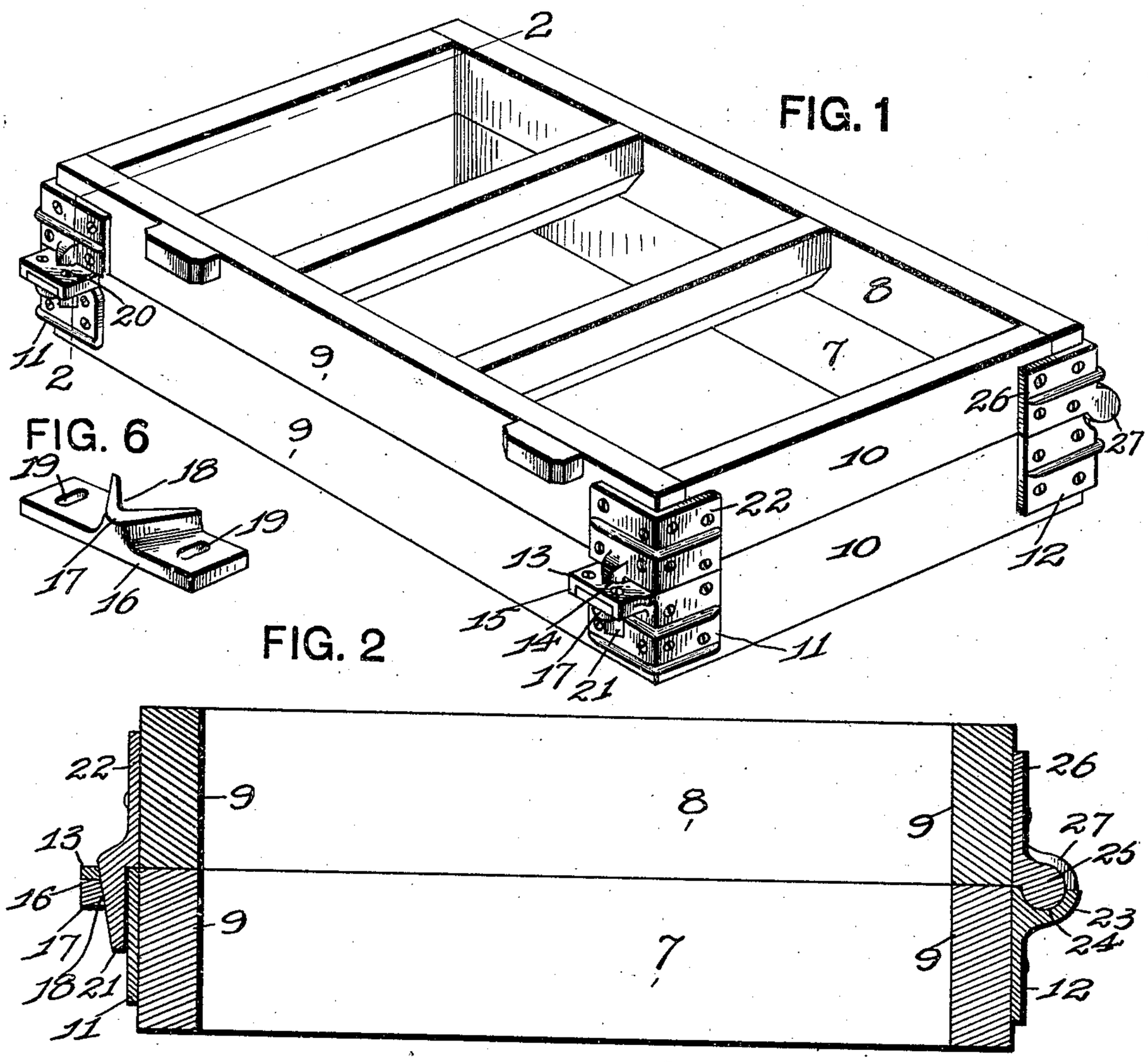
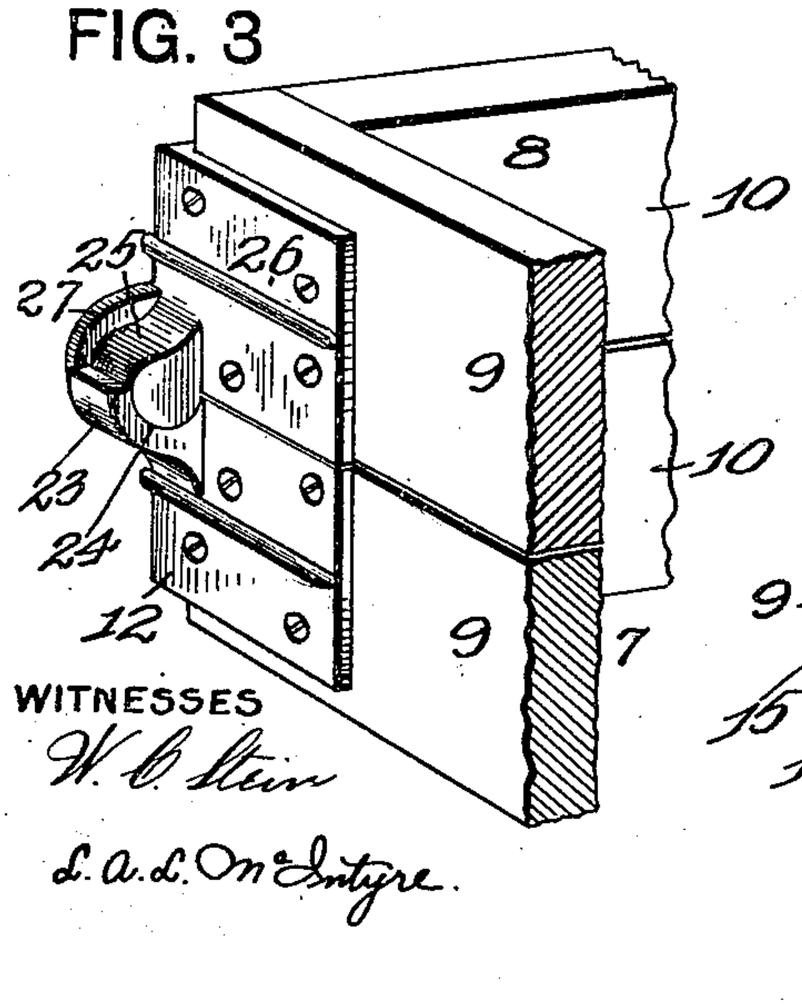


FIG. 1

FIG. 6

FIG. 2

FIG. 3



WITNESSES

W. B. Stein

L. A. L. McIntyre.

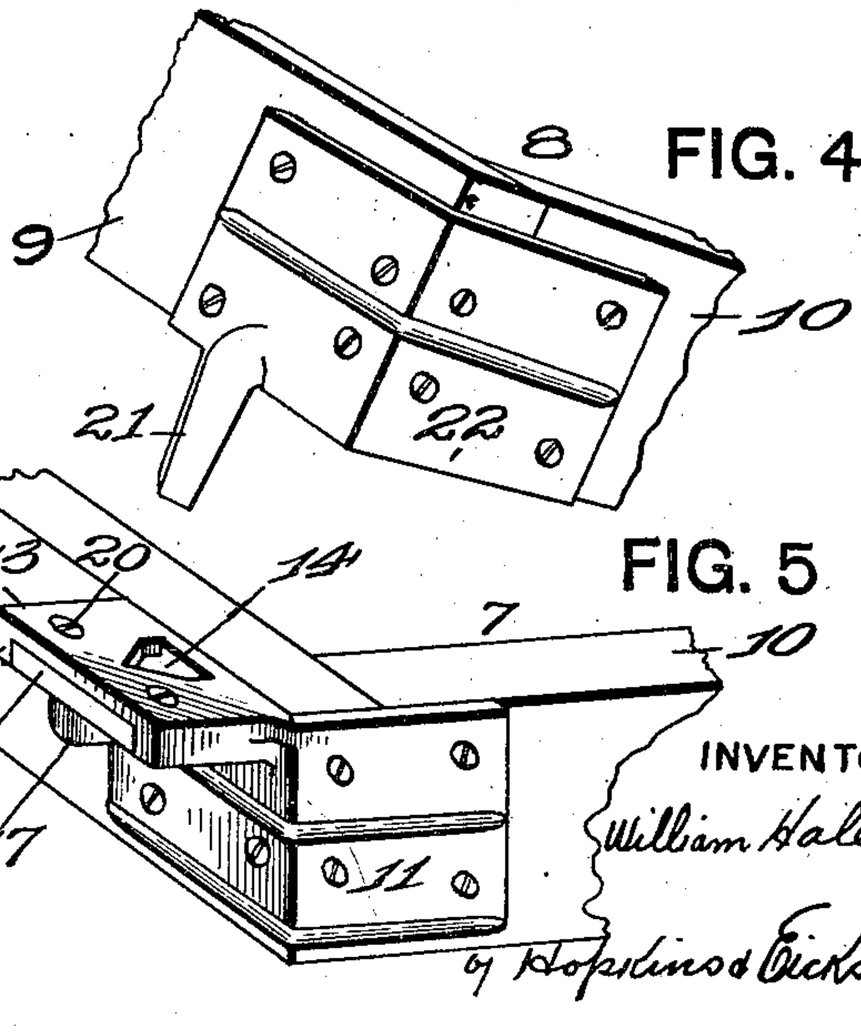


FIG. 4

FIG. 5

INVENTOR

William Hales

by Hopkins & Dicks Attys

UNITED STATES PATENT OFFICE.

WILLIAM HALES, OF ST. LOUIS, MISSOURI, ASSIGNOR TO CHARTER OAK STOVE AND RANGE COMPANY, A CORPORATION OF MISSOURI.

HINGE AND PIN CORNER FOR FOUNDRY-FLASKS.

No. 896,380. Specification of Letters Patent. Patented Aug. 18, 1908.

Application filed April 20, 1908. Serial No. 428,040.

To all whom it may concern:

Be it known that I, WILLIAM HALES, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Hinge and Pin Corners for Foundry-Flasks, of which the following is a specification.

This invention relates to improvements in hinge and pin corners for foundry flasks, and consists in the novel arrangement, construction and combination of parts as will be fully hereinafter described and claimed.

The object of my invention is to provide a cope and drag of a foundry flask with a set of pin corners and hinge corners, the hinges arranged with a knuckle and socket joint, the contacting surfaces being chilled so as to prevent wearing by continuous use so as to permit the cope to be readily adjusted in position on the drag assuming a position in absolute alinement.

A further object of my invention is to place on the corners of a cope and drag metallic corner pieces, one set acting as hinges, the other as locking members, the said corners placed in such position as to permit the edges of the cope and drag to be readily and easily planed in the event of warpage without interfering with the metal constituting the corner pieces.

Figure 1 is a perspective view of my complete invention. Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1. Fig. 3 is a perspective view of one of the hinge corner pieces. Figs. 4 and 5 are perspective views of the corner pieces constituting the locking members showing the two in a position ready to be secured together. Fig. 6 is a perspective view of the adjusting plate made use of in connection with the lower section of the locking member.

Referring to the drawings in detail, 7 indicates the drag and 8 the cope, each of which is constructed of wooden side pieces 9 and end pieces 10, the said side and end pieces being held together by spiking the same.

On the corners of the drag are placed metallic corner pieces 11 and 12. The corner pieces 11 are provided with a projecting ledge 13 in which is the opening 14, its one side being triangular in form and said ledge is provided on its under edges with a flange 15. Between said flanges and snugly fitting on the under surface of the ledge is placed an adjusting plate 16 provided with the projection 17 having a triangular recess 18 which comes in alinement with the opening 14 in the ledge. The said plate is also provided with elongated slots 19 through which bolts 20 are passed, the said bolts retained in position in the ledge, and by means of the nuts on said bolts the plate 16 can be adjusted inwardly or outwardly as found desirable especially when necessary to take up the wear of the pin 21 projecting from the corner piece 22 carried by the cope. The corner pieces 11 and 22 are firmly screwed to the frame comprising the drag and cope as shown plainly in the drawing.

The corner piece 12 secured to the opposite corners of the drag are provided with projections 23 in each of which is provided a socket 24, in which is seated the knuckle 25 of the corner piece 26 carried by the opposite corner of the cope; and formed integral with the knuckle 25 is a projecting flange 27 which contacts with the outer edge of the projection 23 retaining the corner pieces in rigid position, preventing lateral movement.

The contacting surfaces of the socket, knuckle and flange are ground and chilled so as to prevent wearing and by this construction the molder can easily and readily raise the cope from the drag permitting the same to operate on the corner pieces constituting the hinges, and when the cope after having been removed, is again placed in position on the drag, the knuckles are placed in the sockets which form the hinge members and the cope is permitted to seat itself on the upper edge of the drag, and is held in its position by means of the pins 21 lodging in the openings 14 of the opposite corner pieces.

Having fully described my invention, what I claim is:

1. A device of the class described comprising a cope and a drag; metallic corner pieces secured to each corner of the cope and drag; two of said corner pieces of the cope provided with knuckles; the opposite corner pieces of the cope provided with tapered pins; two of the corner pieces of the drag provided with sockets to receive the knuckles and the opposite corner pieces of the drag provided with adjusting plates for receiving the pins; the knuckles and sockets having their surfaces chilled to prevent wearing;

and a flange formed on the knuckle to prevent lateral movement, substantially as specified.

2. A device of the class described, comprising a hinge corner piece, composed of two members, a locking corner piece composed of two members in combination with a cope and drag to which said corner pieces are attached; a knuckle formed on one of the hinge members and a socket formed on the other; a flange formed integral with the knuckle and arranged to contact with the outer surface of the socket member to retain the cope and drag in perfect alinement and prevent lateral movement; a tapered pin formed on one member of the locking corner piece and an adjusting plate carried by the other for receiving the pin, substantially as specified.

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

WILLIAM HALES.

Witnesses:

ALFRED A. EICKS,

WALTER C. STEIN.