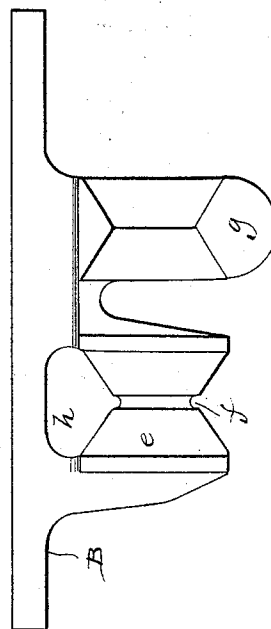
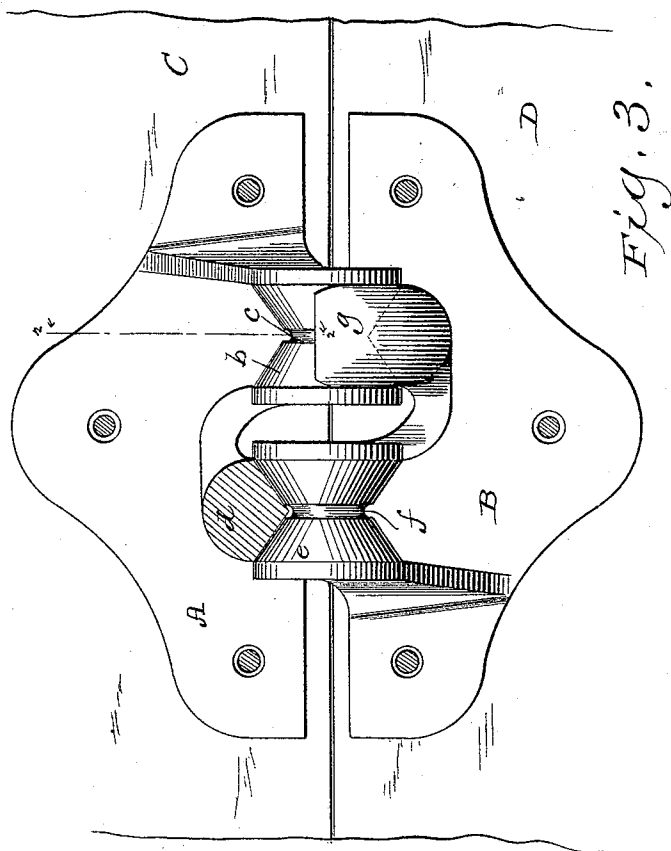
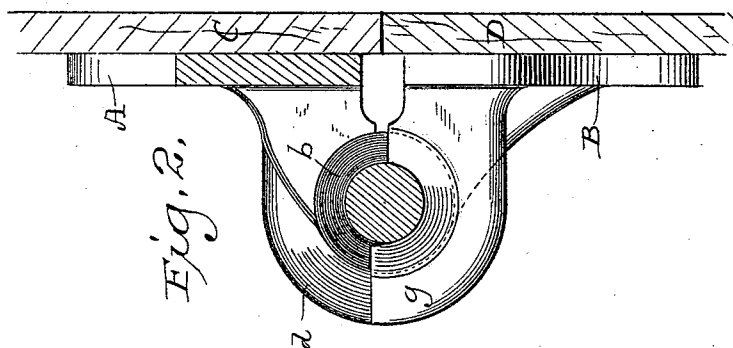


(No Model.)

A. SONNEMANN.
HINGE.

No. 464,269.

Patented Dec. 1, 1891.



Witnesses
Geo W Young
N. E. Oliphant

Fig. 1.

Inventor
August Sonnemann.
By H. L. Underwood,
Attorneys

UNITED STATES PATENT OFFICE.

AUGUST SONNEMANN, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF
TO AUGUST ENGEL, OF SAME PLACE.

HINGE.

SPECIFICATION forming part of Letters Patent No. 464,269, dated December 1, 1891.

Application filed April 6, 1891. Serial No. 387,727. (No model.)

To all whom it may concern:

Be it known that I, AUGUST SONNEMANN, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Hinges; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in certain peculiarities of construction and combination of parts to be hereinafter described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents an elevation of a hinge constructed according to my invention and in position for use; Fig. 2, an end view, partly in section on line 2 2 of the preceding figure; and Fig. 3, a plan view of one section of the hinge.

Referring by letter to the drawings, A B represent the sections of my improved hinge, the latter being especially adapted for use on molders' flasks, as will be hereinafter more fully described.

The section A of the hinge is provided with a circular bearing *b*, preferably inclined in opposite directions from a central annular groove *c*, and said section is also provided with a hook *d*, beveled on one side in opposite directions from its center line.

The section B of the hinge is also provided with a circular bearing *e*, having a central annular groove *f*, and this latter section of the hinge is also provided with a hook *g*, said bearing and hook being duplicates of those above described.

The hinge-sections A B are made right and left, or, in other words, the bearing on one opposes the hook on the other, and each hinge-section is provided with an opening *h* in rear of said bearing, this opening corresponding in contour to that of the adjacent hook.

In practice the meeting points of the opposite bevels on the hooks *d g* enter the annular grooves in the center of the bearings *b e*, and thus the frictional contact of said hooks and bearings is entirely between their opposing inclined faces.

In Figs. 1 and 2 the hinge-sections A B are shown in connection with portions of the drag C and cope D of a molder's flask, and by means of such hinges the cope may be swung over like the lid of a box, or it may be removed from the drag without detaching any portions of said hinges, and in case the flask is turned over the drag may be handled in a like manner.

When hinges such as I have described are operated, the hooks thereon come into engagement with the opposing openings about the time the hinge-sections are at right angles, and thus the part to which the swinging sections are attached is prevented from dropping down.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A hinge comprising two sections, each of which is provided with a circular bearing and a hook, the bearing on one section being arranged to oppose the hook on the other, substantially as set forth.

2. A hinge comprising two sections, each of which is provided with a circular bearing inclined in opposite directions, an opening in rear of the bearing, and a hook beveled on one side in opposite directions from its center line, the bearing on one section being opposed to the hook on the other, substantially as set forth.

3. A hinge comprising two sections, each of which is provided with a circular bearing inclined in opposite directions from a central annular groove, an opening in rear of the bearing, and a hook beveled on one side in opposite directions from its center line, the bearing on one section being opposed to the hook on the other, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

AUGUST SONNEMANN.

Witnesses:

N. E. OLIPHANT,
WM. KLUG.