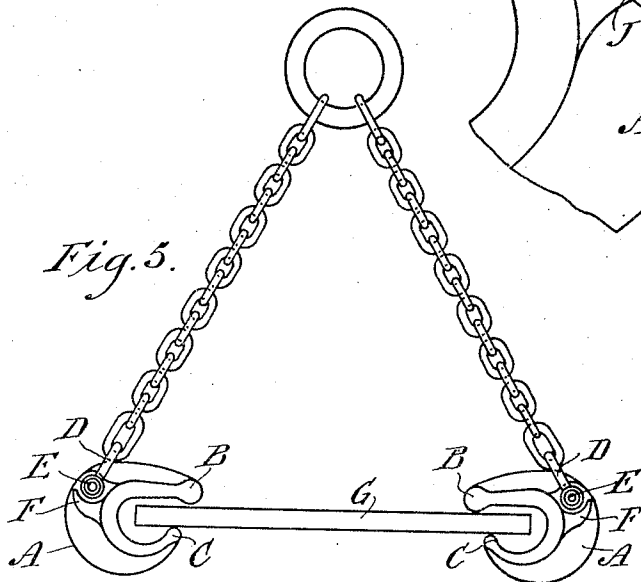
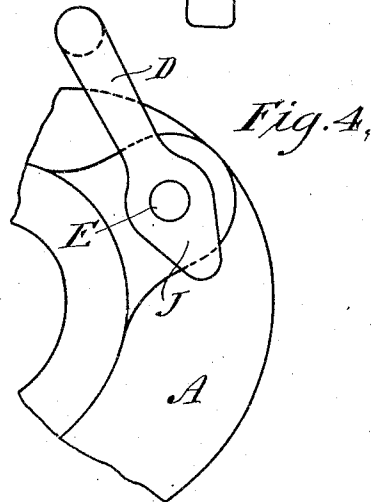
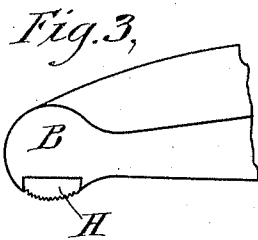
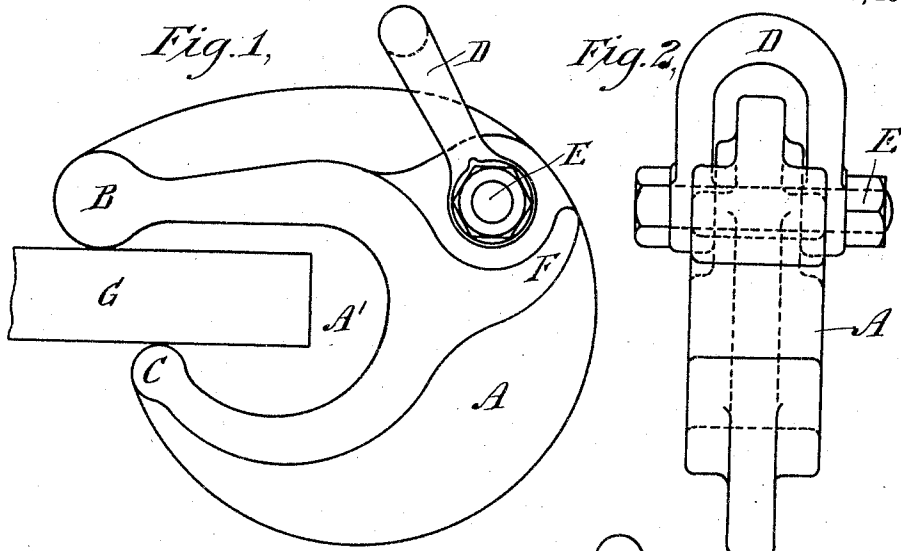


A. G. STRATHERN.
LIFTING CLAMP OR DOG.
APPLICATION FILED DEC. 20, 1918.

1,326,802.

Patented Dec. 30, 1919.



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UNITED STATES PATENT OFFICE.

ALEXANDER GEORGE STRATHERN, OF GLASGOW, SCOTLAND.

LIFTING CLAMP OR DOG.

1,326,802.

Specification of Letters Patent.

Patented Dec. 30, 1919.

Application filed December 20, 1918. Serial No. 267,654.

To all whom it may concern:

Be it known that I, ALEXANDER GEORGE STRATHERN, a subject of the King of Great Britain and Ireland, residing at 50 Wellington street, in the city and county of Glasgow, Scotland, have invented certain new and useful Improvements in Lifting Clamps or Dogs, of which the following is a specification.

10 This invention relates to lifting clamps or dogs of the type which are intended to be used in pairs for lifting plates and other generally flat objects on the flat, that is horizontally, by gripping or biting them at the two ends by top and bottom pressure.

15 The object of the present invention is to improve such clamps of this type as have heretofore, as far as I am aware, been employed or proposed and to produce a simple and effective clamp so constructed that it can hardly be misapplied or improperly used.

25 The characteristics of the clamp which constitute the present invention are that it is provided with upper and lower gripping or biting members or surfaces which are formed integrally with each other and with the body of the clamp, and that the bite of the said upper member or surface on the upper surface of the plate is beyond, or inward of, the bite of the said lower member or surface on the under surface of the plate. A subsidiary feature of the invention is the provision of means for preventing the clamp being employed upside down which would be unsatisfactory as causing the bite on the upper surface of the plate or the like to be outward of the bite on the under surface of the plate.

40 The accompanying drawings illustrate the invention.

Figures 1 and 2 are elevations at right angles to each other showing the form of the clamp.

45 Figs. 3 and 4 show slight modifications of details.

Fig. 5 shows the application of the clamp to the lifting of a plate.

50 Like reference characters denote like parts in the several views of the drawings.

Referring to Figs. 1 and 2, the clamp comprises a body A formed with upper and lower jaws, at the ends of which are biting members B and C respectively. G represents the plate which is being lifted. The jaws of the clamp and the gap A¹ between the jaws are formed of such sizes as to insure that the members B and C shall grip or bite the plate at a short distance from its edge and that the upper bite shall be beyond or inward of the lower bite. The body A is suspended by means of a shackle or link D pivoted to the body at E.

When lifting a plate or the like, two clamps are employed, one at each end of the plate as shown in Fig. 5, the two clamps being suspended by means of their shackles from a sling chain or other suitable appliance. The pull of the chain causes the members B and C of each clamp to bite the upper and lower surfaces respectively of the plate.

A snug F may be formed on the clamp to prevent the shackle being swiveled into such a position as would admit of the clamp being used upside down, that is with the member B below, and the member C above, the object which is being lifted, as such an arrangement would generally be undesirable. An alternative device for effecting the same purpose is shown in Fig. 4, the shackle D being provided with an extension or lug J.

The upper biting member B may, as shown in Fig. 3, be provided with a serrated engaging surface or wear plate H of tempered steel.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. In a clamp for lifting plate-like articles, a body having an upper and a lower jaw rigid therewith, the jaws having biting members at their ends and the upper jaw projecting beyond the lower jaw.

2. In a clamp for lifting plate-like articles, a body having an upper and a lower jaw rigid therewith, the jaws having biting members at their ends and the upper jaw projecting beyond the lower jaw, the body being provided with an opening for the at-

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tachment of a shackle thereto and on one face adjacent the opening with a snug.

3. In a clamp for lifting plate-like articles, a body having an upper and a lower jaw rigid therewith, the upper jaw projecting beyond the lower jaw, a shackle pivoted to the body, and means for limiting the swinging movement of the shackle, whereby

to prevent the clamp from being used upside down.

In testimony whereof I affix my signature in presence of two witnesses.

ALEXANDER GEORGE STRATHERN.

Witnesses:

N. E. L. CREW,
A. E. VIDOL.