

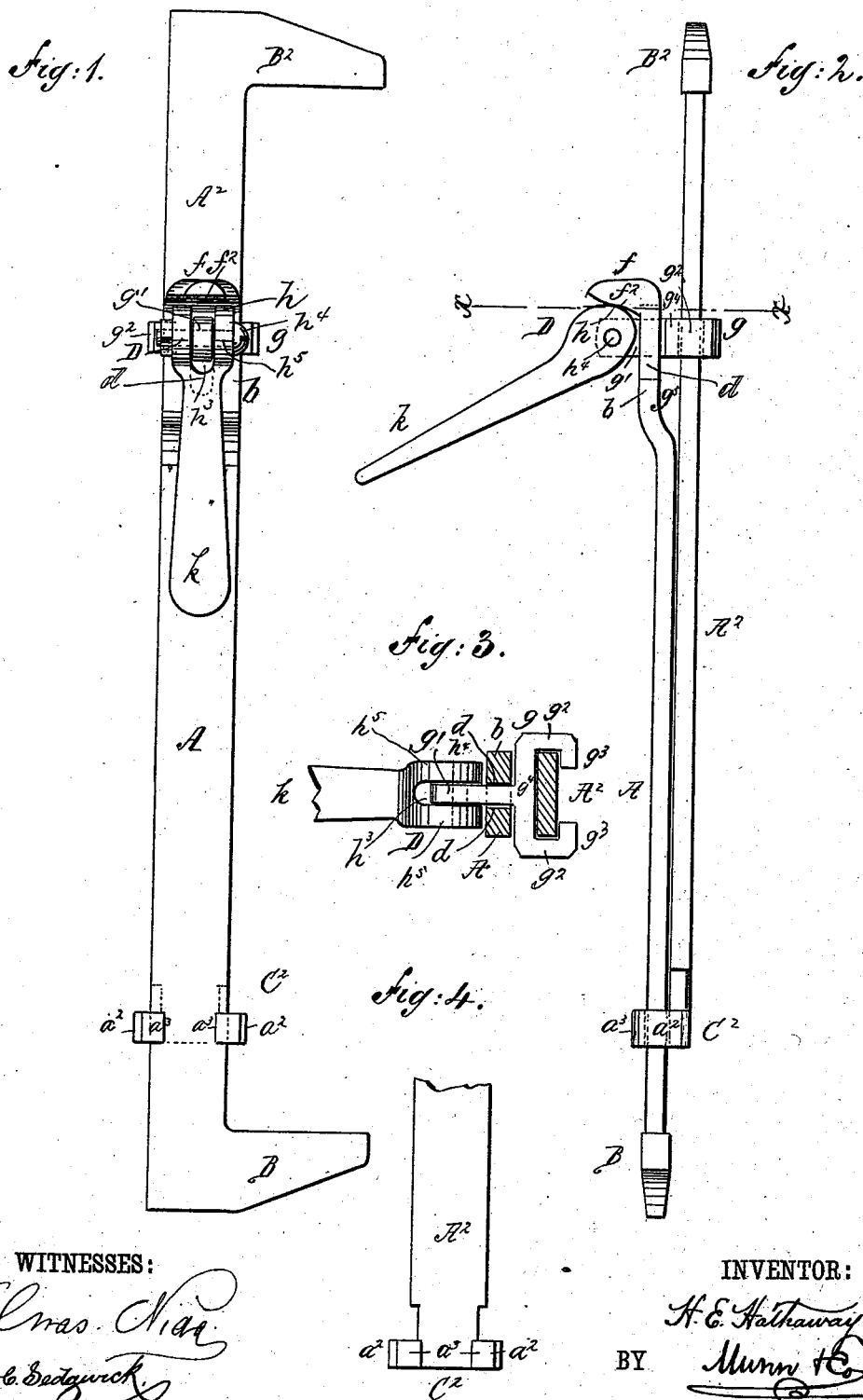
(No Model.)

H. E. HATHAWAY.

CLAMP.

No. 382,808.

Patented May 15, 1888.



WITNESSES:

Chas. N. ...
E. Sedgwick

INVENTOR:

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UNITED STATES PATENT OFFICE.

HENRY E. HATHAWAY, OF MERRILL, WISCONSIN.

CLAMP.

SPECIFICATION forming part of Letters Patent No. 382,808, dated May 15, 1888.

Application filed October 7, 1887. Serial No. 251,698. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. HATHAWAY, of Merrill, in the county of Lincoln and State of Wisconsin, have invented a new and Improved Clamp, of which the following is a full, clear, and exact description.

The present invention in clamps is especially designed for use in foundries for clamping flasks and molds, and by carpenters and others, the object whereof is to secure a quick and easy adjustment and certain fastening and a quick and easy loosening of the clamp; and it consists in the construction and formation of the clamp-jaw bars and the combination of parts therewith and in relation thereto, all substantially as will hereinafter more fully appear and be pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a view of the front side of the clamp with its jaws partially opened from each other. Fig. 2 is an inner edge view of Fig. 1. Fig. 3 is a cross-section on line *x x*, Fig. 2. Fig. 4 is a face view of the inner side of the end portion of one of the clamp-bars.

Each clamp-bar *A A*² is provided at its outer end with a fixed angular jaw, *B B*², the bar *A*² at its inner end being provided with a guiding-clasp, *C*², consisting of angular extensions *a*² and inward projections *a*³, formed integrally therewith, adapted to embrace the edges and lie over a part of the outer face of the bar *A*, and to allow a free play or slide of the one upon the other.

The clamp-bar *A* is provided at its inner end with an offset portion, *b*, having at its extremity an outwardly-projecting lug, *f*, with inclined bearing-face *f*², within which offset portion is formed a central longitudinal slot, *d*, through and beyond which is passed the stud or neck *g*¹ of an independent clasp, *g*, its body portion *g*⁴ lying in the space *g*³ between the offset end of bar *A* and the face of bar *A*², said clasp having angular extensions *g*² and inward projections *g*³, embracing the bar *A*², as seen in Figs. 2 and 3, and a cam, *D*, is pivoted to said stud *g*¹, having its operating-edge *h* toward the edge *f*² of the projection *f* of the

clamp-bar and toward the outer face of said bar. The cam is provided with a handle, *k*, for convenience in operating it.

The cam-body *D* has formed therein a groove, *h*³, within which lies the stud *g*¹ of the clasp, the pivot *h*⁴ extending through said stud and the outer portions, *h*⁵, of the cam-body.

In operation the clamp, with its clasp *g* loose upon the bar *A*², permitting a free sliding of the one bar upon the other, is adjusted with its jaws closely upon and about the flask, &c., it is to bind or hold together, when, on turning the cam, its edge first bears upon the projecting inclined edge *f*² of the bar *A*, serving to slightly force said clamp-bar, with its jaw, inwardly, and then bears upon the outer face of the bar, the pivotal point of the cam gradually being carried outwardly, drawing the clasp *g* firmly upon the bar *A*² and binding the bars, the one firmly upon the other, obviously preventing any longitudinal movement of the jaws.

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

1. The combination, with two sliding jaw-bars, of a clasp separate from and independent of both bars, embracing one of said bars and provided with a stud extended to the outer side of the other bar, and a pivoted cam hung upon said stud, substantially as and for the purpose described.

2. The combination, with two sliding jaw-bars, *A A*², one, *A*, of which is provided with an inclined projection, of a clasp separate from and independent of both bars embracing the other bar, *A*², and provided with a stud extended to the outer side of said bar *A*, and a pivoted cam hung upon said stud, substantially as and for the purpose described.

3. The combination, with two sliding jaw-bars, one of which is provided with a slot, of a clasp separate from and independent of both bars embracing the other of said bars, and provided with a stud extended through said slotted bar, and a pivoted cam hung upon said stud, substantially as and for the purpose described.

4. The combination, with two sliding jaw-bars, one of which is provided with an inclined projection, *f*, and a slot, *d*, of a clasp,

g, embracing the other of said bars, provided with a stud, *g'*, extended through said slotted bar, and a pivoted cam, *D*, hung upon said stud, substantially as and for the purpose described.

- 5 5. The combination, with two sliding jaw-bars, A^2 , one, *A*, of which is provided with an inclined projection, *f*, and a slot, *d*, and the other, A^2 , with a clasp, a^2 , of a clasp, *g*, embracing said bar A^2 , provided with a stud, *g'*,

extending through said slotted bar, and a 10 grooved pivoted cam, *D*, hung upon said stud, all substantially as and for the purpose described.

HENRY E. HATHAWAY.

Witnesses:

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