

(No Model.)

H. PFUND.
DEVICE FOR HANDLING BOOKS.

No. 571,789.

Patented Nov. 24, 1896.

Fig. 1.

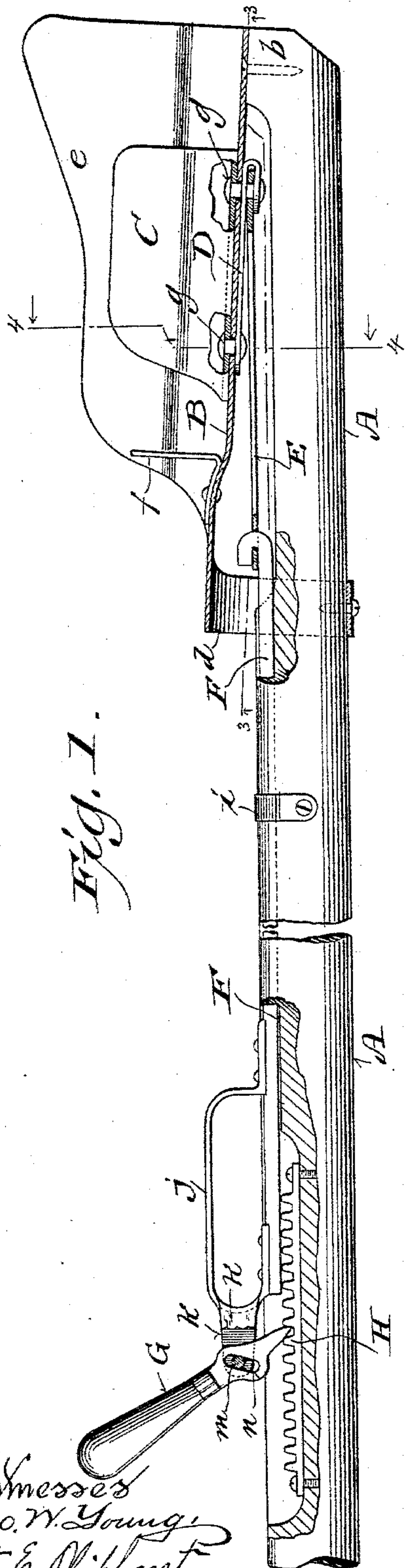


Fig. 2.

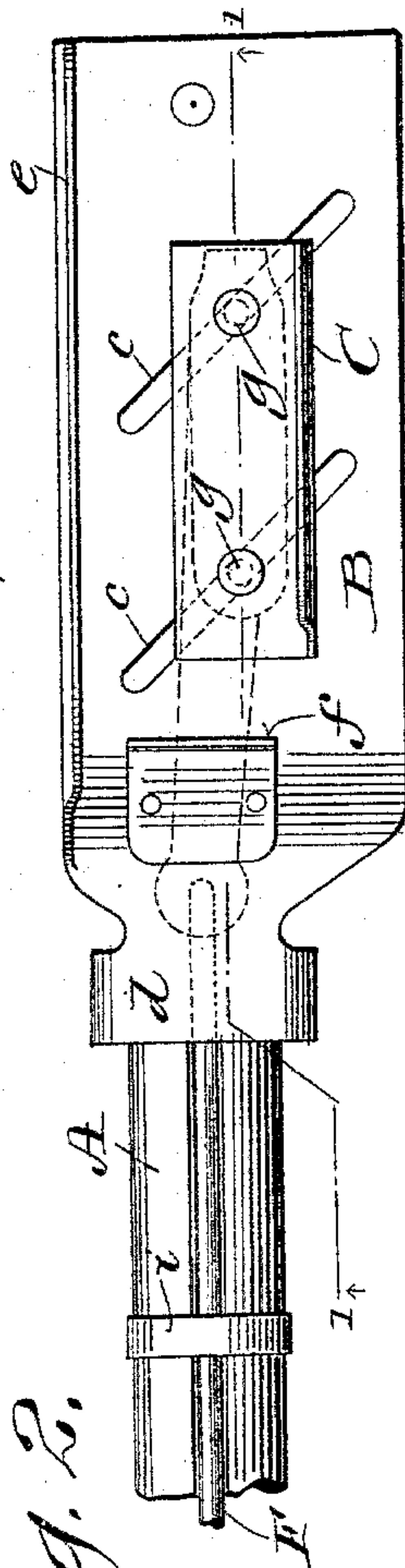


Fig. 3.

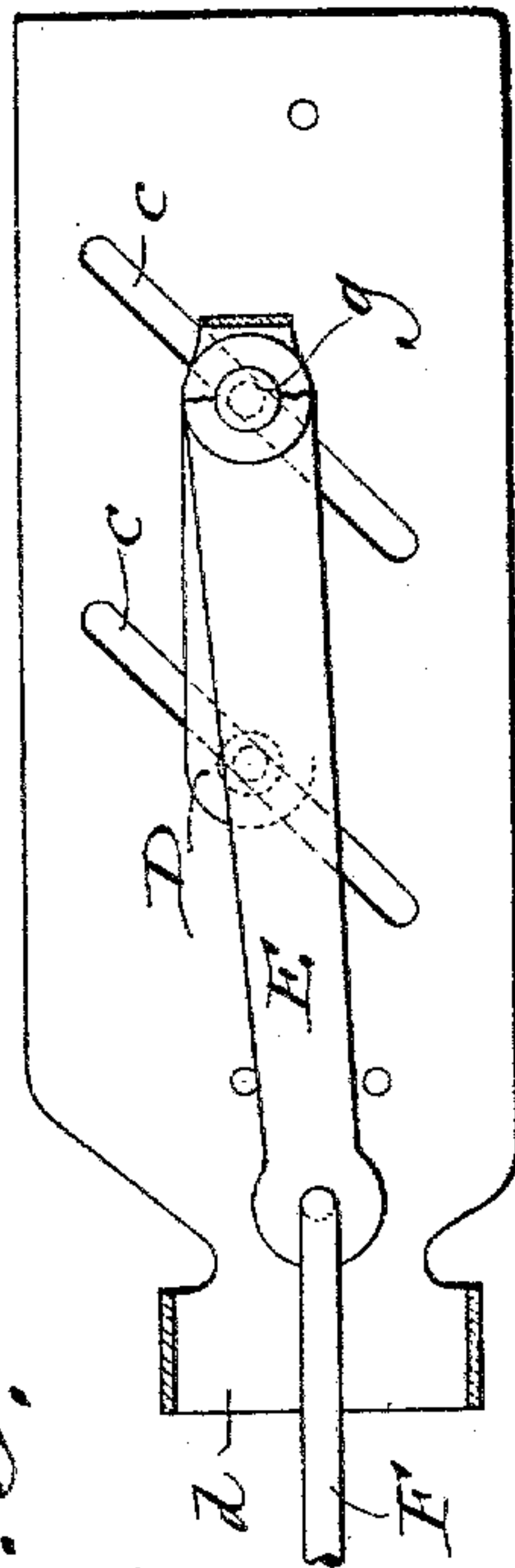
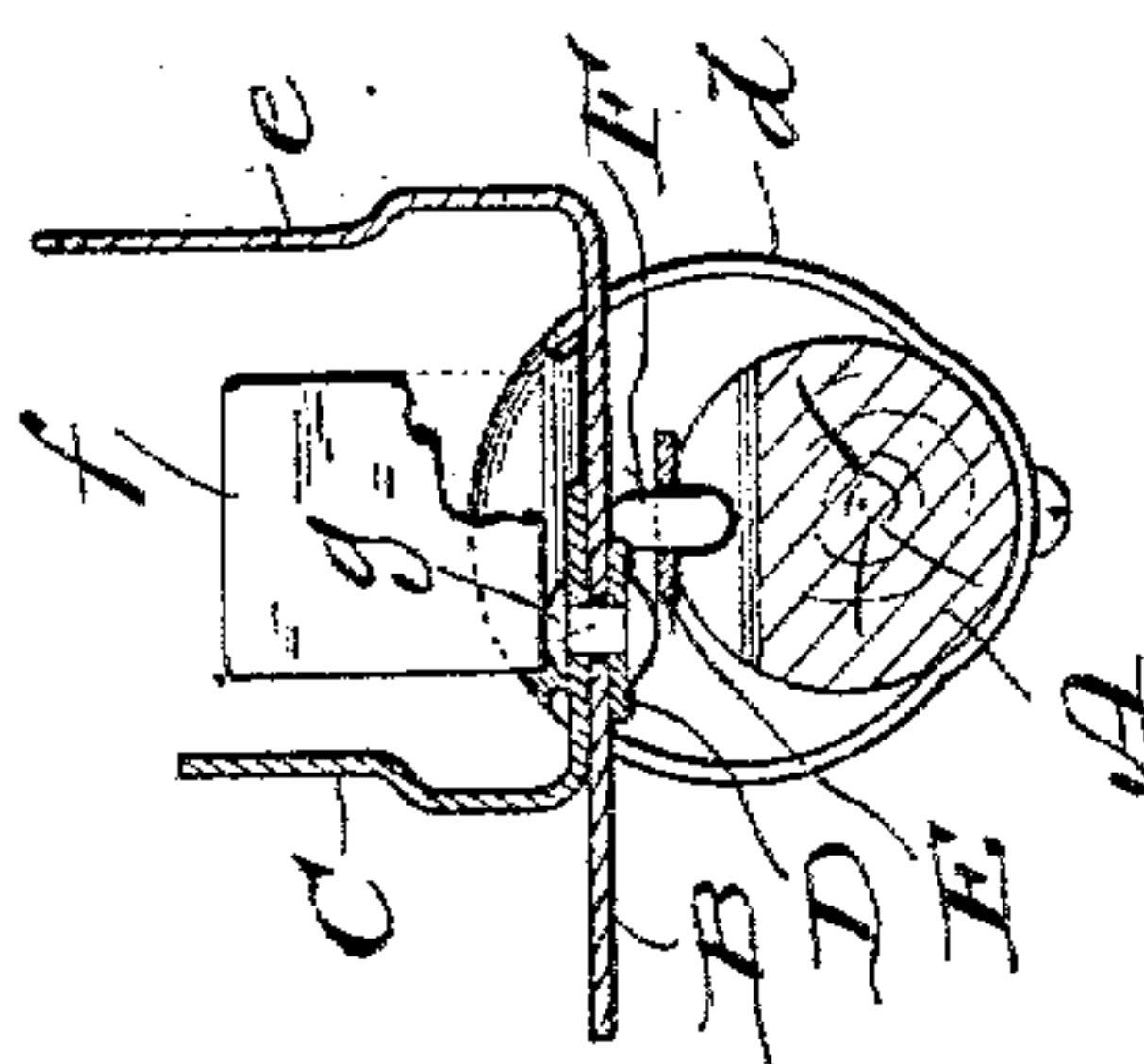


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

HERMAN PFUND, OF MADISON, WISCONSIN.

DEVICE FOR HANDLING BOOKS.

SPECIFICATION forming part of Letters Patent No. 571,789, dated November 24, 1896.

Application filed October 28, 1895. Serial No. 567,085. (No model.)

To all whom it may concern:

Be it known that I, HERMAN PFUND, a citizen of the United States, and a resident of Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Devices for Handling Books; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to improve the device set forth in United States Patent No. 532,425 of January 8, 1895, as organized for aiding librarians and others in the taking down and replacing high-shelf books.

The said invention therefore consists in certain peculiarities of construction and combination of parts hereinafter set forth with reference to the accompanying drawings and subsequently claimed, whereby I prevent spring of the jaw-controlling slide-rod set forth in said patent.

In the drawings, Figure 1 represents a side elevation of a portion of the improved book-handling device, partly in section, on line 1 1 of Fig. 2, and also partly broken away; Fig. 2, a plan view of the head portion of said device; Fig. 3, a sectional view on line 3 3 of Fig. 1, and Fig. 4 another sectional view taken on line 4 4 of Fig. 1.

Referring by letter to the drawings, A represents the handle of the book-handling device, this handle being a pole or bar of any suitable length and material, preferably wood. The front of the handle is recessed at its upper portion to obtain clearance for certain of the working parts hereinafter set forth, and rigidly secured to the flattened upper end *b* of said handle is a plate B, of metal or other suitable material, this plate being herein shown as provided with diagonal slots *c* and having its lower end in the form of a ring *d*, made fast to said handle, a screw or other suitable means being employed for that purpose.

It is preferable to have the ring *d* of such dimensions as will compel the plate B to stand at an angle to the handle A, whereby the operation of the device is facilitated. At right angles to the front of the plate, and preferably in one piece therewith, is a flange *e* of suitable width, and the lower end of said plate

is provided with a flange or foot-piece *f*, that also extends in a forward direction, this latter flange or foot-piece being rigidly attached to the aforesaid plate or made in one piece therewith, as may be found most convenient in practice.

Loose on the front of the plate B is a right-angle slide or jaw C, having lugs *g* that work in the diagonal slots of said plate, and as herein shown these lugs are preferably rivets connecting the slide with a stay-bar D, loose against the back of the aforesaid plate. The upper end of a link E is in loose engagement with the uppermost lug *g* of the jaw C, and if the bar D be employed it is preferable to have its upper end bent over and engaged with said lug against the back of the link, as herein shown.

The lower end of the link E is in loose engagement with the upper end of a rod F, that occupies a longitudinal groove in the front of the handle A, bands *i*, staples, or other suitable means being employed to maintain said rod in its guide-groove.

The lower end of the rod F is provided with a grip *j*, and extended longitudinally from the grip are parallel ears *k*, joined by a pin *m*, that engages a slot *n* in a lever-dog G, the latter coöperating with a rack H, made fast in a deepened lower portion of the longitudinal handle-groove above specified.

The slot *n* in the dog G compensates for spring that would otherwise come upon the rod F in the operation of the device herein set forth, said dog having a yielding play on its fulcrum-pin *m*, when operating in conjunction with the rack H, to take up slack in the clamp comprising the flanged and foot-pieced plate B and sliding jaw C above specified, it being understood that the essential feature of the present invention is the aforesaid slotted rack-engaging dog in free slot engagement with said fulcrum-pin, the other features of the book-handling device being the same as set forth in the above-named patent.

In practice the movable jaw portion C of the clamp is adjusted by means of the rod F in link connection therewith to fit the book it is desirable to handle. The book being engaged, the clamp-jaw C is brought as tight

as possible against the same by a draw on the rod F, after which the dog G is operated in conjunction with the rack H to thereby exert a considerable leverage on said rod, the result being that all the slack in the clamp is taken up and the aforesaid book tightly gripped, so that it may be readily lifted from one elevation to another.

To unlock the clamp, the dog G is swung forward on its fulcrum to disengage from the rack H, and the rod F pushed in the same direction.

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

1. In a book-handling device, the combination of a handle, a flanged plate rigidly secured to one end of the handle, a jaw having loose play on the plate opposite the flange of the same, a jaw-operating rod having free play longitudinally of said handle, a fulcrum-pin carried by the rod, a lever-dog having a slot engaged by the fulcrum-pin, and a rack

on the aforesaid handle for the engagement of the lever-dog.

2. In a book-handling device, the combination of a handle, a flanged plate rigidly secured to one end of the handle, a jaw having loose play on the plate opposite the flange of the same, a jaw-operating rod adjustable longitudinally of said handle, a grip on the lower end of the rod provided with longitudinally-extending parallel ears, a fulcrum-pin uniting the ears, a lever-dog having a slot engaged by the fulcrum-pin, and a rack on the aforesaid handle for engagement of the lever-dog.

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

HERMAN PFUND.

Witnesses:

ERNEST N. WARNER,
ADOLF PFUND.