No. 667,623. Patented Feb. 5, 1901.

H. HEUMANN.

BUNDLE CARRIER.

(Application filed Dec. 15, 1900.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

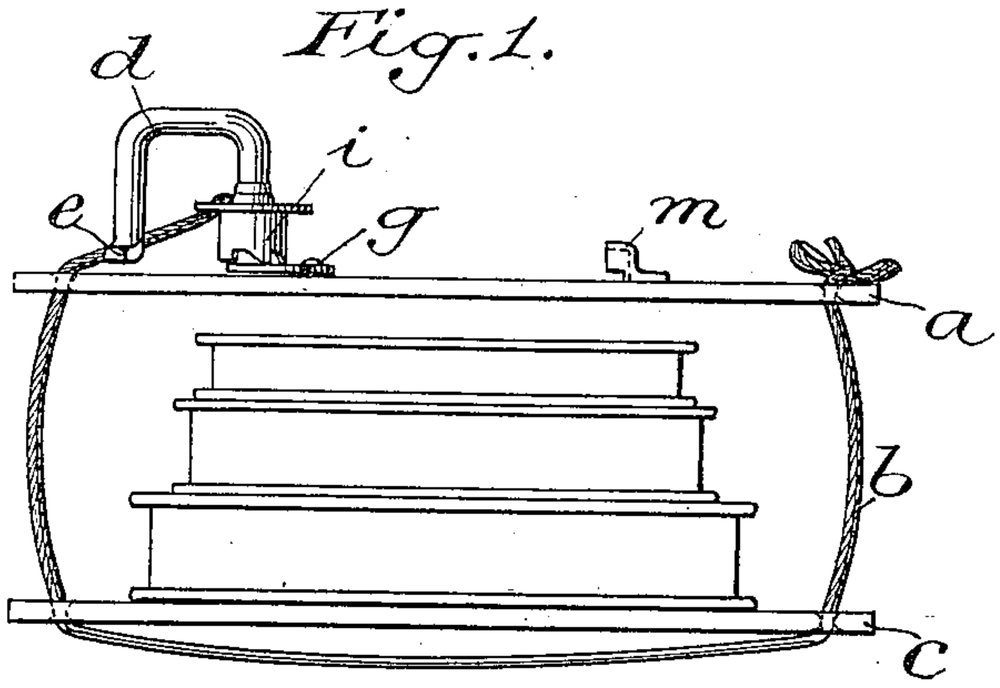


Fig. 2.

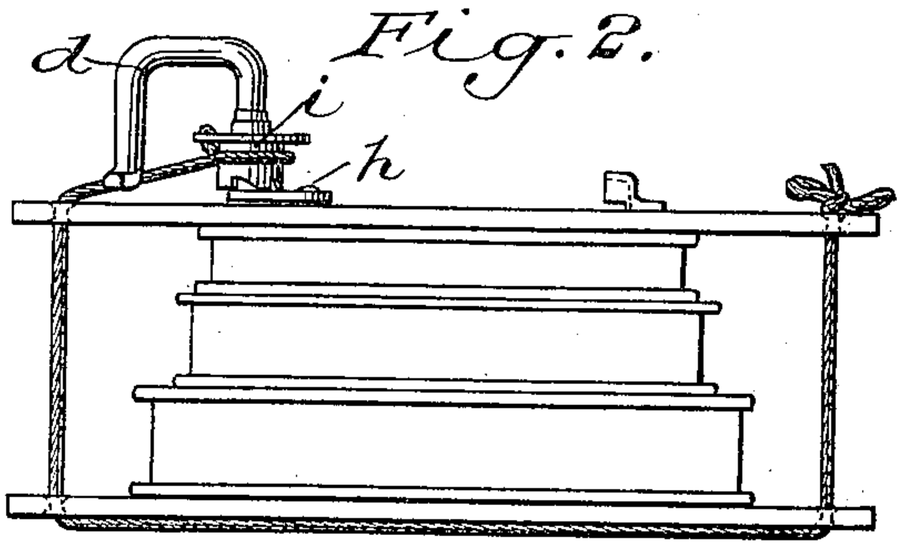


Fig. 3.

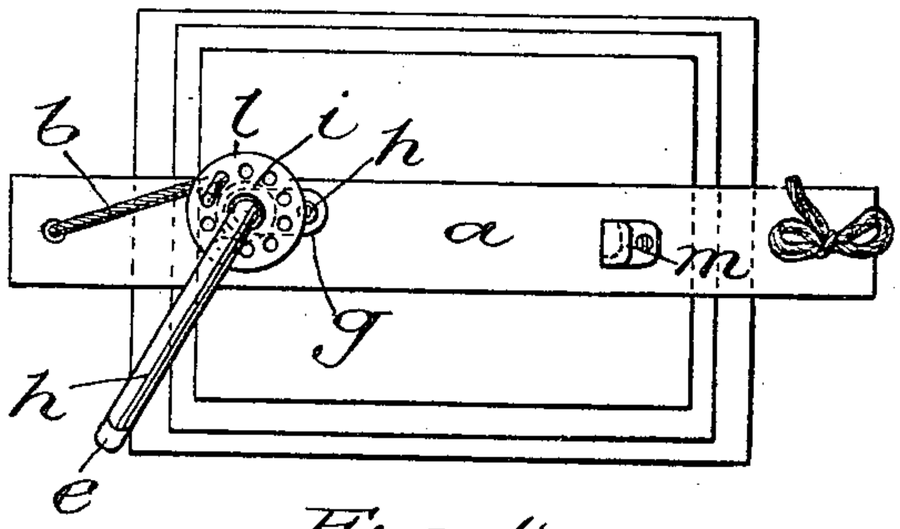
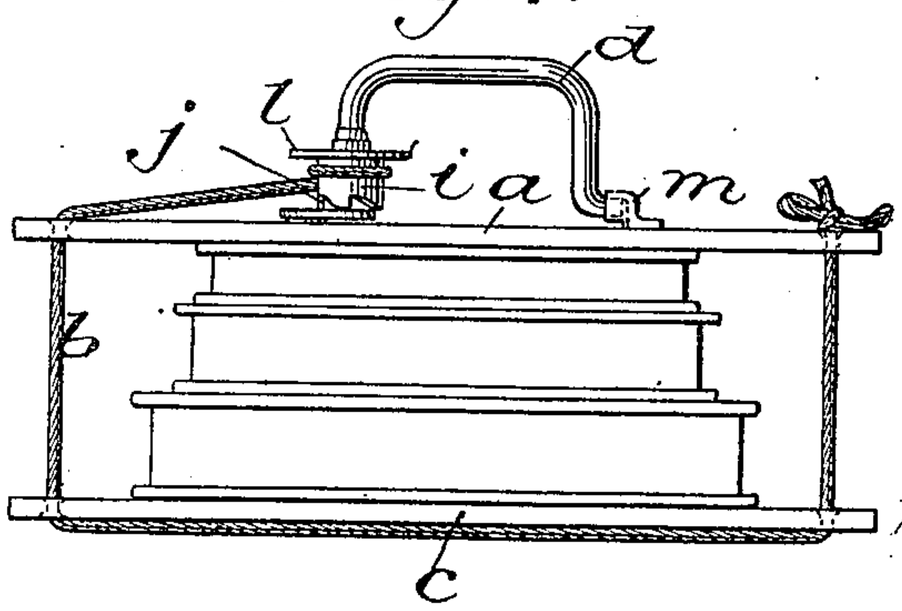


Fig. 4.



Witnesses:-
George Barry Jr.
Henry Thieme.

Inventor:-
Hugo Heumann
by attorneys
Brown & Swan.

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2 Sheets—Sheet 2.

Fig. 5.

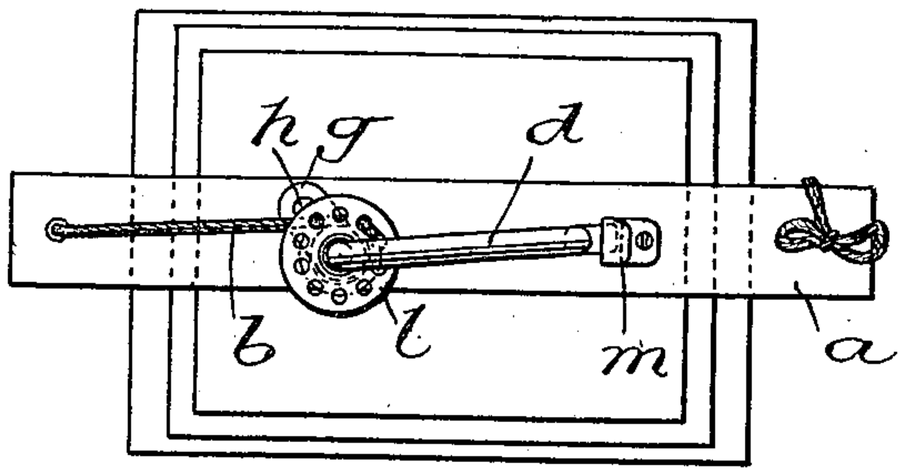


Fig. 6.

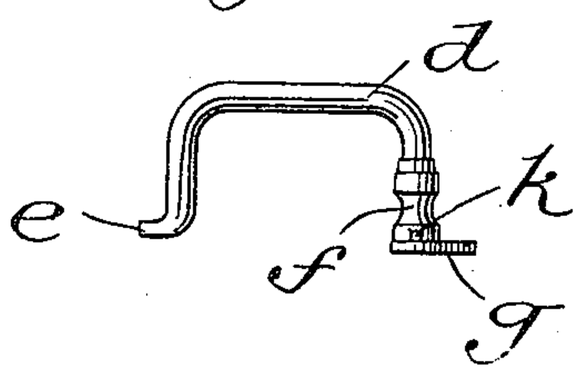


Fig. 7.

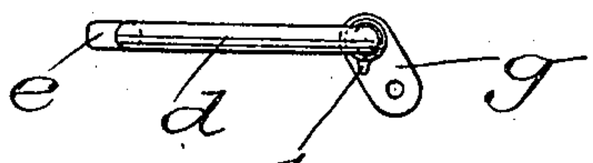


Fig. 8.

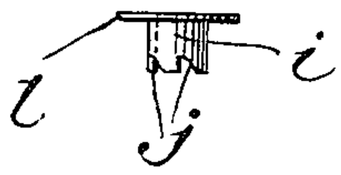
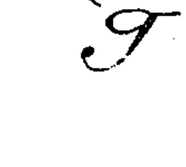


Fig. 10.

Fig. 9.



Witnesses:-
George Barry Jr.
Henry Phieme

Inventor:-
Hugo Heumann
by attorneys
Brown & Howard

UNITED STATES PATENT OFFICE.

HUGO HEUMANN, OF NEW YORK, N. Y.

BUNDLE-CARRIER.

SPECIFICATION forming part of Letters Patent No. 667,623, dated February 5, 1901.

Application filed December 15, 1900. Serial No. 39,962. (No model.)

To all whom it may concern:

Be it known that I, HUGO HEUMANN, a subject of the Emperor of Germany, and a resident of the borough of Manhattan, in the city and State of New York, have invented new and useful Improvements in Bundle-Carriers, of which the following is a specification.

My invention relates to certain new and useful improvements in bundle-carriers whereby the carrier may be caused to very snugly embrace the bundle to be carried.

My invention further consists in a device of the above character which will be very simple in construction, inexpensive, which may be easily engaged with and disengaged from the bundle, and in which an extra cinch may be obtained for securely holding the bundle by the use of a swinging handle combined with a rotary winding-spool mounted on the handle eccentric to the pivot around which the handle-swings.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 represents in side elevation my improved bundle-carrier with several books placed therein ready to be engaged therewith. Fig. 2 represents a view in side elevation of the carrier after the winding-spool has been operated to wind up the superfluous portion of the flexible connection, the parts being in the position which they assume before the books are cinched. Fig. 3 is a top plan view of the same. Fig. 4 is a view in side elevation after the handle has been swung around into its carrying position for cinching the books between the upper and lower slats of the carrier. Fig. 5 is a top plan view of the same. Figs. 6 and 7 are respectively side and top plan views of the handle. Figs. 8 and 9 are respectively side and inverted plan views of the winding-spool, and Fig. 10 represents three views of the stop for limiting the swinging movement of the handle after it has brought the winding-spool beyond center.

The slat upon which the several operating parts are mounted is denoted by *a*, and it is made of some stiff material—such, for instance, as wood—and may be made of any required length and breadth. A flexible connection *b* leads downwardly through a hole in one end of the slat *a* and upwardly through another hole in the other end of the said slat. This flexible connection is intended to be passed around the bundle and when tightened serves to draw the bundle snugly into engagement with the said slat *a*. In the present instance a lower slat *c* is provided, through which the flexible connection *b* passes downwardly at one end and upwardly at the other end, so that when the flexible connection is tightened it will confine the bundle snugly between the slat *a* and the slat *c*.

A handle is hinged on the slat *a*, the gripping portion of the handle being denoted by *d*. The outer portion of the handle after leading downwardly is extended outwardly to form a lug *e*, which serves to engage a stop on the slat to be hereinafter more fully described. The inner portion of the handle *d* is extended downwardly, as shown at *f*, and is provided with an arm *g*, extended inwardly at an angle to the handle, the free end of the said arm being hinged to the slat *a*, as shown at *h*. The downwardly-extended portion *f* of the handle *d* is preferably enlarged to form a suitable bearing for a rotary winding-spool *i*. The winding-spool *i* may be locked to the handle against a rotary movement thereon by providing the spool with a notch *j*, fitted to engage a lug *k* on the handle. In the present instance the spool is provided with an annular series of these notches *j* in the form of ratchet-teeth, so that the spool may be rotated in one direction, but is held against movement in the other direction by the lug *k*. This spool *i* is preferably provided with a disk-like head *l*, by means of which the spool may be readily grasped for rotating the same.

The flexible connection *b* after it passes upwardly through the slat *a*, at one end thereof, is secured to the winding-spool *i*. The other end of the flexible connection *b* may be tightened in a knot after it passes upwardly through the slat *a*, leaving approximately enough of the flexible connection to permit the ready insertion of a bundle of a certain size between the upper and lower slats *a* and *c*.

A stop *m* is secured rigidly to the top of the slat *a* in a position to receive the outer end *e* of the handle when the handle has been swung around into position for carrying the bundle and for giving the extra cinch thereto. This

stop *m* is provided with a hood portion *n*, which is so formed that it will permit the outer end of the handle to swing into and out of the hood from one direction, but will prevent the end of the handle from swinging beyond the hood in the other direction. This hood serves to engage the outer end of the handle when the handle is in position for carrying the bundle, so as to divide the weight of the bundle between the inner and outer ends of the handle.

The operation of my device is as follows: The bundle to be carried is inserted into the space between the slats *a* and *c*, which bundle in the present instance is represented as several books. The winding-spool *i* is then rotated until nearly all of the slack in the flexible connection is wound thereon. The handle is then swung around on its pivot *h*, thus moving the spool bodily around with it and drawing the flexible connection still tighter. The stop *l* is so arranged that the outer end of the handle when engaged therewith has swung the spool beyond center, so that the tension on the flexible connection serves to automatically hold the handle in its position within the stop.

By the tightening means above described I am enabled to obtain an approximately tight grip by winding up the spool while the handle is in its open position. Then as the handle is swung around in its closed position it will positively draw the carrier snugly into engagement with the bundle.

By projecting the arm *g* of the handle at an angle to the grip portion of the handle I am enabled to swing the spool beyond center and at the same time keep the grip portion of the handle parallel with the slat *a* when the handle is in its closed position.

It is evident that slight changes might be resorted to in the construction, form, and arrangement of the several parts without departing from the spirit and scope of my invention. Hence I do not wish to limit myself strictly to the structure herein set forth; but

What I claim is—

1. A bundle-carrier comprising a slat, a flexible connection, a swinging handle hinged on the slat, a rotary winding-spool for the flexible connection, mounted on the handle eccentric to the pivot of the handle and a stop for limiting the swinging movement of the handle, substantially as set forth.

2. A bundle-carrier comprising a slat, a flexible connection, a swinging handle hinged on the slat, a rotary winding-spool for the flexible connection mounted on the handle eccentric to the pivot of the handle, whereby the spool is moved bodily as the handle is swung and a stop on the slat arranged in position to engage the handle when the spool has been swung beyond center, substantially as set forth.

3. A bundle-carrier comprising a slat, a flexible connection, a swinging handle comprising a grip portion and an arm extended at an angle therefrom, the outer end of said arm being hinged to the slat, a winding-spool for the flexible connection, mounted on the handle eccentric to the pivot of the handle and a stop arranged in position to engage the free end of the handle when the spool has been swung beyond center, substantially as set forth.

4. A bundle-carrier comprising a slat, a flexible connection, a swinging handle hinged on the slat, a rotary winding-spool for the flexible connection mounted on the handle eccentric to the pivot of the handle whereby the spool is moved bodily as the handle is swung, a connection between the rotary winding-spool and the handle for locking the spool against unwinding and a stop on the slat arranged in position to limit the swinging movement of the handle, substantially as set forth.

5. A bundle-carrier comprising a slat, a flexible connection, a swinging handle hinged on the slat, a stop on the slat for limiting the swinging movement of the handle, a rotary winding-spool for the flexible connection mounted on the handle eccentric to the pivot of the handle whereby the spool is moved bodily as the handle is swung and a connection between the winding-spool and the handle for permitting the spool to be rotated in one direction and locking it against movement in the other direction, comprising a lug on the handle and an annular series of ratchet-teeth on the spool arranged in position to engage the lug, substantially as set forth.

6. A bundle-carrier comprising a pair of slats, a flexible connection for drawing the slats toward each other, a swinging handle hinged on one of the slats, a rotary winding-spool mounted on the handle eccentric to its pivot and secured to the flexible connection and means for limiting the swinging movement of the handle, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 14th day of December, 1900.

HUGO HEUMANN.

Witnesses:
FREDK. HAYNES,
HENRY PHIERNS.