N. OAK.

BARREL-CARRIERS.

No. 188,027. Patented March 6, 1877.

FIG. 1.

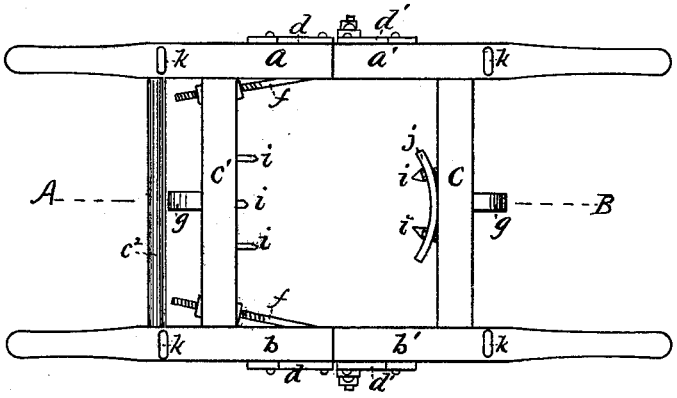


FIG. 2.

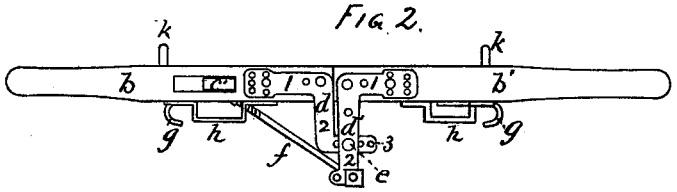


FIG. 3.

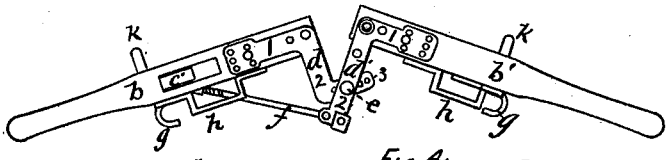


FIG. 4.

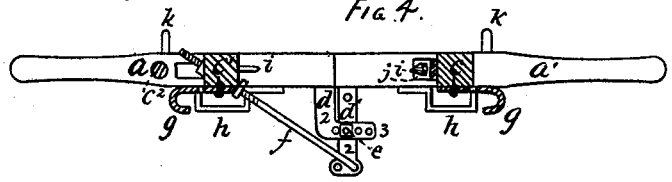
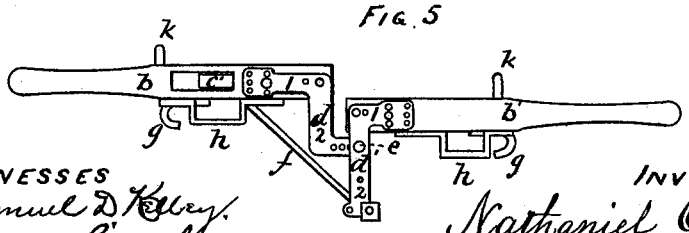


FIG. 5



WITNESSES
Samuel D. Kelley.
Eugene Humphrey.

INVENTOR.
Nathaniel Oak,
By Porter & Hutchinson,
Attorneys.

UNITED STATES PATENT OFFICE.

NATHANIEL OAK, OF EXETER, MAINE.

IMPROVEMENT IN BARREL-CARRIERS.

Specification forming part of Letters Patent No. **188,027**, dated March 6, 1877; application filed February 8, 1877.

To all whom it may concern:

Be it known that I, NATHANIEL OAK, of Exeter, State of Maine, have invented Improvements in Barrel-Carriers, of which the following is a specification:

The object of my invention is to effect certain improvements in barrel-carriers which are formed with jointed sides; and the invention consists in a depending hinge, by means of which the opening capacity of the carrier is increased. It also consists in the peculiar construction of said hinge, whereby the sections of the side pieces of the carrier may be adjusted out of plane for special uses, as also the sections of said side pieces may be separated at varying distances for the reception of packages of different bulk. It also consists in a sliding griping-bar, arranged to be automatically adjusted or actuated by the manipulation of the handles of the carrier. It also consists in combining, with the griping-bars, can-hooks, whereby the barrels may be handled as well by the chines as by the bilge. It also consists in combining, with the sliding gripe-bar, a rigid auxiliary bar, by which the side jaws are rigidly held in position; and it also consists in the combination of griping-dogs and a bilge-bar for securing and supporting the barrel in process of transportation, all as will, by the aid of the accompanying drawings, be fully described.

In said drawings, Figure 1 is a top or plan view of my improved carrier. Fig. 2 is a side elevation thereof. Fig. 3 is also a side elevation, but showing the carrier opened for the reception of a package. Fig. 4 is a longitudinal vertical section taken on line A B, Fig. 1; and Fig. 5 is also a side elevation, but showing the two halves or sections of one of the side pieces adjusted out of plane, or one higher than the other.

In these drawings, the sections *a* and *a'* constitute one of the side pieces or handles, and *b* and *b'* the other. Transversely to these side bars are arranged the cross-bars *c* and c^1, the former of which is rigidly secured at its respective ends in sections *a'* and *b'*. Bar c^1 terminates at its extremities in tenons, which are arranged to slide freely in mortises formed in sections *a* and *b*, as shown in Figs. 2, 3, 4, and 5. c^2 is an auxiliary bar, which is rigidly secured in sections *a* and *b*, and serves to secure the same at all times in proper relative positions, an office which bar c^1, from its loose connection therewith, could not accomplish. The parts *d* and *d'* of the hinge are respectively secured to the sections *b* and *b'*, as shown. *d* is formed with three angles or members, (marked 1 2 3,) and part *d'* is formed with two angles or members, (marked 1 2.) Member 3 of part *d* is perforated with a series of holes, as shown, while member 2 of part *d'* is also perforated with several holes, one above the other, and by varying the position in one or both of said members of the connecting-pin *e*, the relative positions of the sections of the side bars may be varied, as shown. Thus, in Figs. 1, 2, 3, 4, said pin is so inserted in the two parts *d* and *d'* that when the sections of the carrier are in line the meeting ends are in contact, while in Fig. 5 pin *e* is shown inserted in a hole higher in member 2, and nearer the end of member 3, whereby section *b* is elevated above section *b'*, and the same are somewhat separated, and the space between bars *c* and c^1 is proportionally increased. Member 2 of part *d'* of the hinges extends at all times below member 3 of part *d*, and is perforated with holes, in which is pivoted the angle end of rods *f*, while the opposite ends of said rods are, by means of the screw-nuts thereon, adjustably connected with bar c^1. By means of these rods *f*, secured to bar c^1 and to part *d'* of the hinge below its pivot *e*, when the ends of the side bars are depressed, as shown in Figs. 3, 4, the bar c^1 is forced away from bar *c* an additional distance to that caused by the direct lever-like action of the hinge itself.

The can-hooks *g g*, being attached to the bars *c* c^1, are, of course, thereby adjustable relatively to each other, and are thus applicable to casks of varying length when applied to the chines for lifting purposes.

When the barrel is to be carried end upward, the teeth *i i*, inserted in the cross-bars, insure the requisite contact, the segmentary bar *j* serving to retain the barrel equidistant between the handles.

Instead of mortises in sections *a b*, for the reception of the ends of bar c^1, metal loops *h h* may be secured to the side pieces, as shown.

The loops *k k* are for securing the ends of

shoulder-straps to relieve the arms of the bearers.

I do not claim in the abstract barrel-carriers formed with jointed side bars; nor do I claim, broadly, the adjustable cross-bar; but

What I do claim is—

1. In barrel-carriers, a hinge so constructed and arranged that its pivotal point is out of the plane of the side bar, whereby the hinge serves as a lever to augment the adjustable distance between the cross-bars, substantially as and for the purposes specified.

2. In barrel-carriers, the hinge, consisting of the part *d*, with its members 1 2 3, and the part *d'*, with its members 1 2, substantially as described and shown.

3. In barrel-carriers, a hinge constructed and arranged to be susceptible of horizontal or end adjustment, substantially as described and shown.

4. In barrel carriers, a hinge constructed and arranged with a vertical adjustment, whereby the sections may be in line, or one section of the carrier may be adjusted above the other, substantially as described and shown.

5. In a barrel-carrier, a cross-bar, constructed, combined, and arranged to be automatically adjusted relatively to the pivotal center of the side bars, substantially as described and shown.

6. In a barrel-carrier, the combination of the sliding bar c^1, the adjusting-rods *f f*, and the hinge, substantially as and for the purposes specified.

7. In a barrel-carrier, the combination of side-bar sections *a b*, sliding cross-bar c^1, and the auxiliary bar c^2, substantially as and for the purposes specified.

8. In a barrel-carrier, the combination of the teeth *i i*, for contact with the barrel-bilge, and the hooks *g g*, to engage the chines, substantially as described and shown.

9. In a barrel-carrier, in combination with the cross-bar *c*, the segmentary bilge-bar *j*, substantially as and for the purposes specified.

NATHANIEL OAK.

Witnesses:
MOSES H. LUFKIN,
NATHANIEL E. PAINE.