A. G. FELKER.

CRATE.

APPLICATION FILED MAR. 30, 1908.

910,518. Patented Jan. 26, 1909.

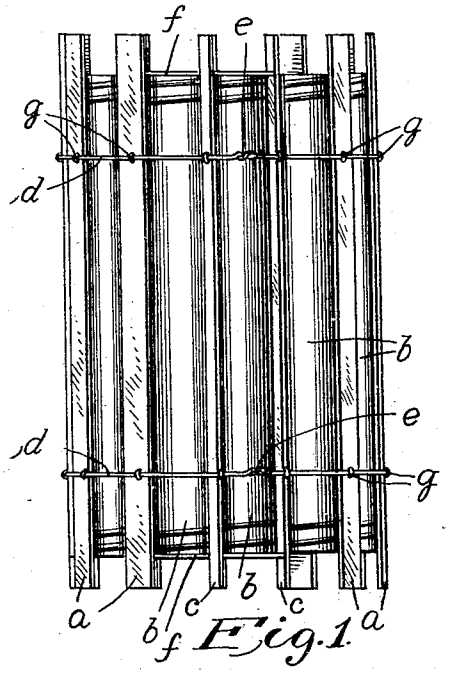


Fig. 1.

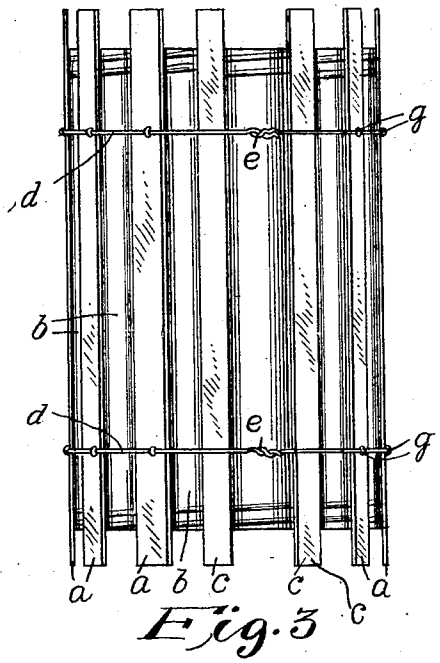


Fig. 3.

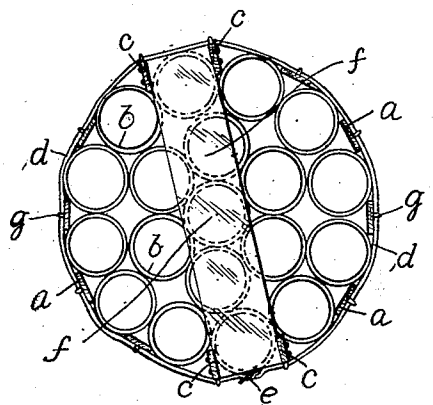


Fig. 2.

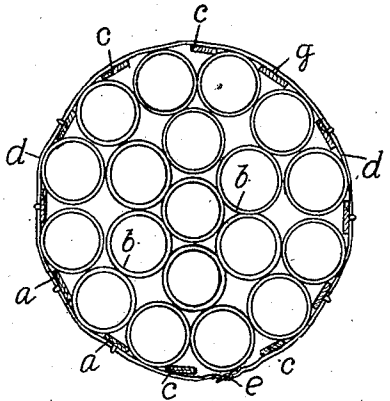


Fig. 4.

Witnesses:
Harry C Hebig
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Albert G. Felker Inventor
By his Attorney
James Hamilton

UNITED STATES PATENT OFFICE.

ALBERT G. FELKER, OF SPARTA, WISCONSIN.

CRATE.

No. 910,518. Specification of Letters Patent. Patented Jan. 26, 1909.

Application filed March 30, 1908. Serial No. 424,112.

To all whom it may concern:

Be it known that I, ALBERT G. FELKER, a citizen of the United States, residing at Sparta, in the county of Monroe and State of Wisconsin, have invented certain new and useful Improvements in Crates, of which the following is a specification, reference being had to the accompanying drawing.

My invention relates to improvements in crates and particularly to crates adapted and designed for holding tubular articles; and an object of my invention is to provide a crate of the character just described which will be simple in construction, cheap in manufacture and highly efficient in use.

In the drawings illustrating the principle of my invention and the best mode now known to me of applying that principle, Figure 1 is an elevation of my new crate; Fig. 2 is a plan view of the same; Fig. 3 shows in elevation the crate before the header-slats are turned edge outward and Fig. 4 is a plan view of what is shown in Fig. 3.

The crate comprises several strips or slats *a*. The latter are placed with their wide flat faces against the tubes *b* which are to be held in place by the crate for transportation. The header-strips *c* (of which there are four) are first placed with their flat faces against the tubes *b* in the same manner as are the strips *a*. The hoop wires *d* are then passed around the cleats *a*, *c* and drawn as taut as possible and are fastened by twisting their ends together, as shown at *e*. The header-strips *c* are now turned edge on; that is, with one longitudinal edge outward and the opposite edge bearing against one of the tubes, as is best shown in Fig. 2. By thus turning the header-slats edge on, the binding wires *d* are drawn more taut, as will be readily understood. Across the top and bottom of the bundle of tubes and over the ends of the central tube are passed two header-boards *f* which are comparatively wide and fit between the upper and lower ends of the header-strips *c*. The ends of each header-board *f* are nailed to the ends of the header-strips *c*. Small staples *g* are used to fasten the wire hoops *d* in place upon the slats *a*, *c*.

My new crate is designed particularly to hold firmly in place tubular or cylindrical articles. With the crates heretofore on the market, it has been found difficult to support the row of tubes extending across the greatest width at the top and bottom of the package; that is, extending along the direction of the diameter of the approximately circular top and bottom of the package.

It will be found that my new crate will keep the tubes firmly supported and in place during transportation and will effectually prevent deformation.

I claim:

1. A crate of the class described consisting of the combination of a plurality of slats some of which are arranged with a face turned outward and the remainder of which are arranged with a longitudinal edge turned outward; a header-board extending across an end of the crate and having its ends fastened to the slats which have a longitudinal edge turned outward; and hoop devices which encircle said slats.

2. A crate of the class described consisting of the combination of a plurality of slats some of which are arranged with a face turned outward and the remainder of which are arranged with a longitudinal edge turned outward, the last-named slats being arranged in pairs; a header-board extending across an end of the crate and having its ends fastened each between a pair of the last-named slats; and hoop devices which bind together said slats.

3. In a crate of the class described, the combination of a header-board which extends across the end of the crate; a plurality of pairs of slats between each pair of which lies one end of said header-board; said slats being fastened to said header-board with their faces against the longitudinal edges of said header-board; and hoop devices which bind together said slats.

In witness whereof I have hereunto set my hand in the presence of the two undersigned witnesses.

ALBERT G. FELKER.

Witnesses:

JAMES W. SPRADLING,

SAM HOLLOWOOD.