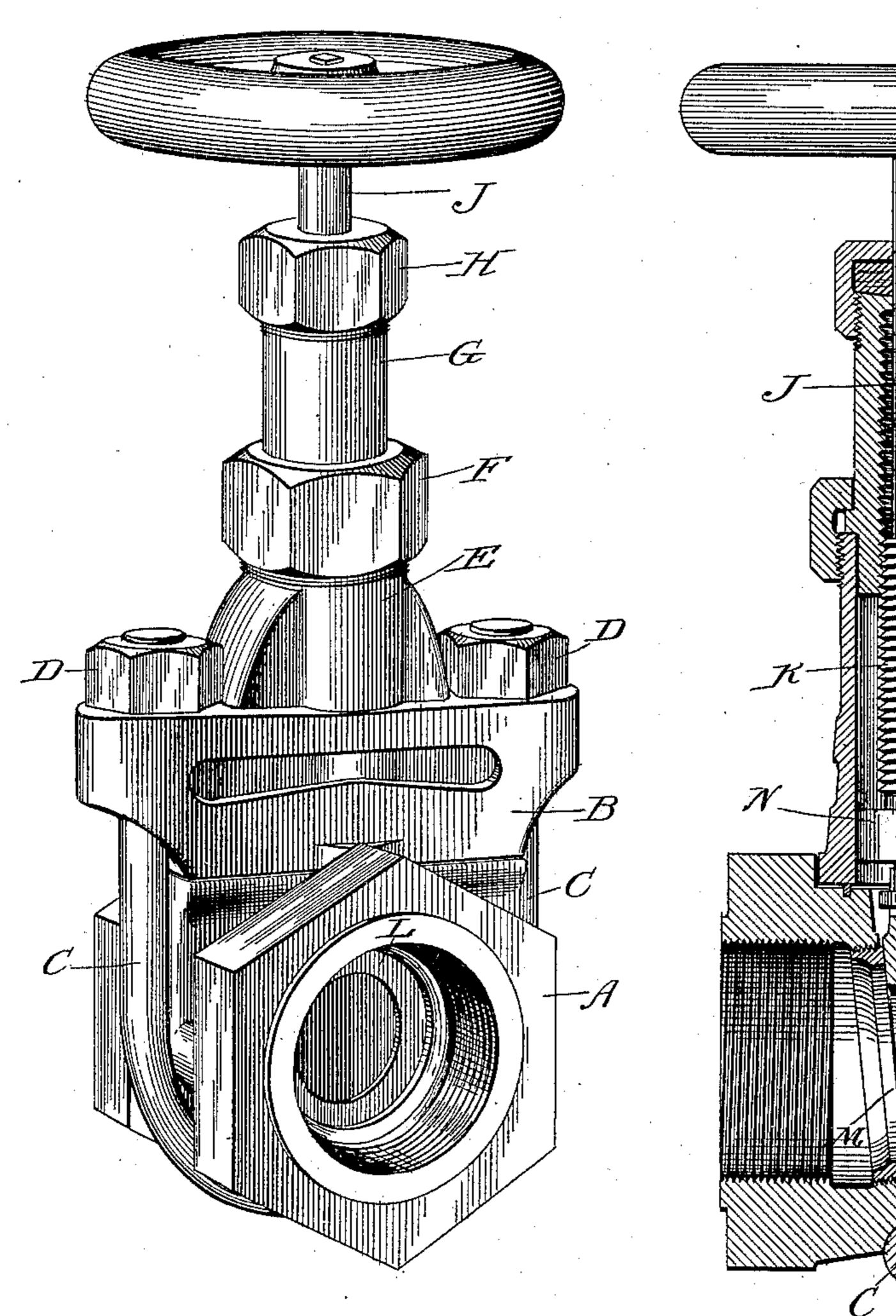
## E. H. LUNKEN. STRAIGHTWAY VALVE.

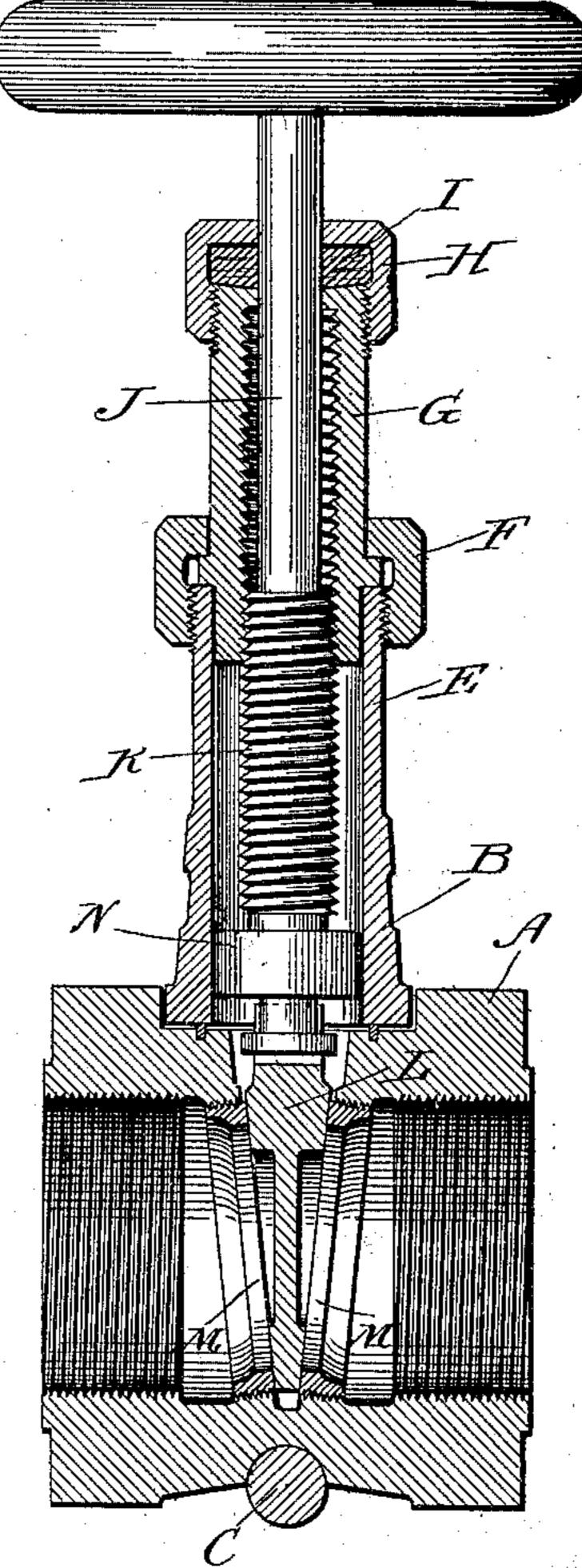
(Application filed Aug. 12, 1897.)

(No Model.)

777.

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Wetnesses Martin A.Olsen. Leonora Wiseman

Treventor Emma H. Lude by Email Rectar

## United States Patent Office.

EDMUND H. LUNKEN, OF DENVER, COLORADO, ASSIGNOR TO THE LUNKEN-HEIMER COMPANY, OF CINCINNATI, OHIO.

## STRAIGHTWAY VALVE.

SPECIFICATION forming part of Letters Patent No. 639,258, dated December 19, 1899.

Application filed August 12, 1897. Serial No. 647,968. (No model.)

To all whom it may concern:

Be it known that I, EDMUND H. LUNKEN, a citizen of the United States, residing at the city of Denver, in the county of Arapahoe, in the State of Colorado, have invented a certain new and useful Improvement in Straightway Valves, of which the following is a description, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my new valve, and Fig. 2 a middle vertical section of the same longitudinally of the passage through

the valve. The valve-casing proper consists of the body 15 portion A, having the opposite internallythreaded pipe connections and the hub or bonnet portion B, the latter being a narrow elongated body seated transversely upon the part A of the casing and secured to the latter by 20 a U-shaped clip C, passing around the body portion A and extending at its upper end through ears formed upon the opposite ends of the bonnet B and having binding-nuts D screwed upon its upper ends above said ears, 25 the construction of the valve in these respects being similar to that of valves heretofore patented to me. The bonnet or hub B of the valve has at the middle of its upper side a vertically-extending tubular neck E, 30 whose internal bore extends downwardly through the bonnet and communicates at its lower end with the valve-opening in the body A. Coupled to the upper end of the neck E of the bonnet by a union-nut F is a vertical 35 internally-threaded extension G, upon whose upper end is screwed a cap-nut H, which confines a packing I around the valve-stem J. The latter is provided with a threaded portion K, adapted to cooperate with the threads in 40 the extension G, and at its extreme lower end has coupled to it the valve L, which is wedgeshaped and cooperates with the inclined removable seats M M, which are screwed into the body A, as shown. Near its lower end, 45 below its threaded portion K, the valve-stem

J in the instance shown in the drawings is

provided with an enlargement or collar N,

fitting the internal bore of the bonnet B and its neck E and serving to guide the valve-stem in its vertical movements. This enlarge-so ment or collar N is not essential, however, and may be dispensed with; nor is it essential that the internally-threaded extension G be secured to the upper end of the neck E of the bonnet by a union-nut F, since, instead of this means of connection, the lower end of the extension G may be externally threaded and the upper end of the neck E be internally threaded and the former screwed directly into the latter.

The casing proper of the valve, consisting of the body A and bonnet B E, is made of castiron to give it great rigidity in proportion to the weight of metal employed, as well as to lessen its cost, while the internally-threaded 65 extension G is made of brass, so that the threads coöperating with those on the valve-stem may be of brass and not liable to rust.

Having thus fully described my invention, I claim—

The combination with the valve-body having valve-seats therein and an opening in the side between said seats, of an iron hub or bonnet having a hollow neck, a U-shaped clip passing around said body and engaging said 75 hub or bonnet for securing the same to said body over said opening, a brass extension for said neck having a screw-threaded bore of a diameter less than that of the bore of the neck, a union-nut for stationarily securing 80 said brass extension to the outer end of said neck, a valve, a valve-stem therefor having a screw-threaded portion engaging the screwthreaded bore of said brass extension and adapted to work in said neck out of contact 85 with the walls thereof, a guide-collar on the inner end of said valve-stem, and a packingnut for the stem secured on said brass extension, substantially as described.

EDMUND H. LUNKEN.

Witnesses:
EDWARD RECTOR,
LEONORA WISEMAN.