S. L. GOLDMAN.

CONVEYER ROLLER.

APPLICATION FILED DEC. 27, 1909.

960,010.

Patented May 31, 1910.

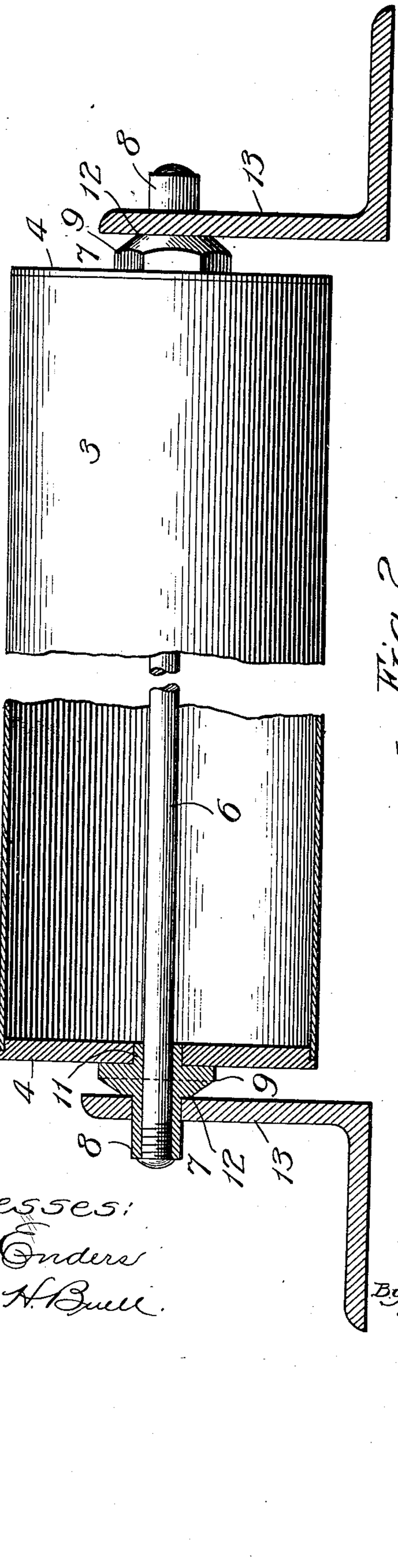

Fig. 1.

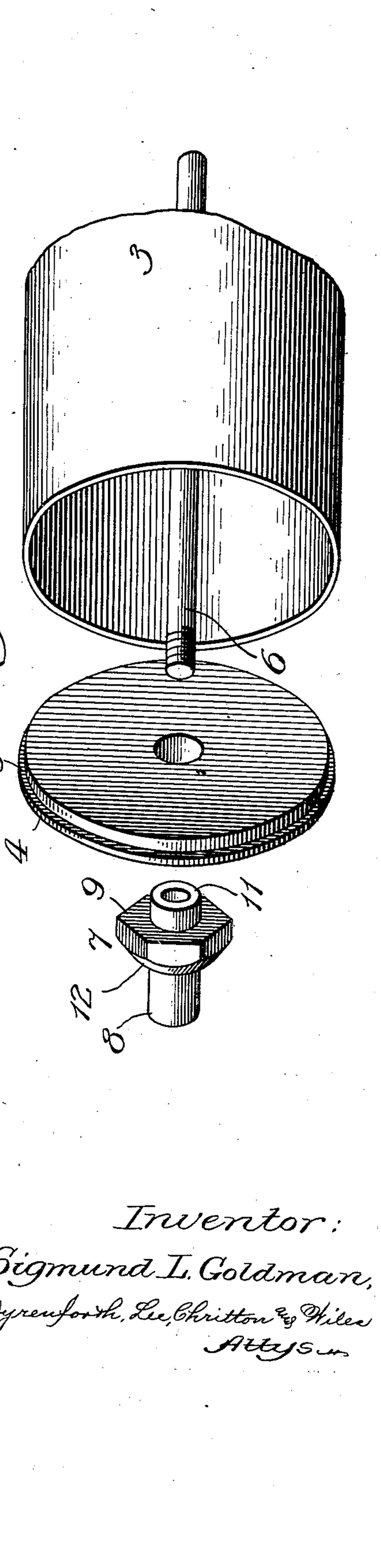

Fig. 2.

Witnesses:

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UNITED STATES PATENT OFFICE.

SIGMUND L. GOLDMAN, OF CHICAGO, ILLINOIS.

CONVEYER-ROLLER.

960,010. Specification of Letters Patent. Patented May 31, 1910.

Application filed December 27, 1909. Serial No. 535,095.

To all whom it may concern:

Be it known that I, SIGMUND L. GOLDMAN, a citizen of the United States, residing at 3900 Union avenue, Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Conveyer-Rollers, of which the following is a specification.

My invention relates to an improvement in the class of rollers used in gravity conveyers; and it is illustrated in the accoming drawing, in which—

Figure 1 is a broken and partly sectional view in elevation of my improved roller in position in the side-members of a conveyer-frame, and Fig. 2 is a broken perspective view showing parts of the roller in unassembled relation.

The essential parts of my improved roller are a cylindrical tube 3, preferably of steel, heads 4 having annular shoulders 5 at which they are pressed into the ends of the tube, a shaft 6 extending lengthwise and centrally through the tube and heads and having its ends threaded, and similar journaling-nuts 7 of peculiar construction adapting them to be screwed on the ends of the shaft and form the roller-journals to seat in the opposite side-members 13, 13 of a conveyer-frame, centering means for the tube on the shaft and substantially frictionless spacers between the heads and frame-members. The nut comprises an internally-threaded sleeve 8 terminating in a head 9, shown of hexagonal shape, with a nipple 11 projecting centrally from its face; the outer side of the nut being beveled, as shown, to form a frictional bearing surface 12 of relatively small or reduced area.

To assemble the parts of the roller, with the heads pressed into the tube-ends to fasten them in place and the shaft passing through relatively large central openings in them, the nuts are screwed upon the shaft-ends, thereby introducing the nipples 11 into the head-apertures and abutting the inner and relatively extensive inner nut-faces flatwise against the head-surfaces. Thus the nipples center the heads and tube relative to each other, the nuts secure these parts together with extreme rigidity, the comparatively extensive area of the inner nut-faces tend, without riveting or further fastening, to hold the heads in place against angular slanting, or other displacement in the tube-ends, and the reduced area of the nut-faces 12 presents so little surface to the inner sides of the frame-members 13 as to render negligible the friction against turning the roller on its journals 8 in the frame-member bearings. When the parts are assembled to permanently fasten them together the ends of the shafts may be upset or riveted, as shown.

The more important advantages of the construction thus described lie in its comparative simplicity, cheapness of manufacture, strength, rigidity and durability, which are the qualities most sought for improvement in the art.

What I claim as new and desire to secure by Letters Patent is:—

1. A conveyer-roller comprising, in combination, a tube, heads on the tube-ends, having central openings, a shaft extending through the heads, and roller-journaling nuts on the shaft-ends bearing, at their inner faces, against the opposite heads about the openings therein and centering the tube on the shaft, and provided with outer faces of relatively small diameter.

2. A conveyer-roller comprising, in combination, a tube, heads having circular shoulders, separably confined on the tube-ends and provided with central openings, and nuts, each consisting of a journal-forming sleeve screwing on a shaft-end and terminating in a head having a nipple projecting from its inner face into a head-opening, said nuts bearing at their inner faces against the opposite heads about the openings therein.

3. A conveyer roller comprising, in combination, a tube, heads on the tube-ends provided with central openings, a shaft extending through the head-openings, and nuts, each consisting of a journal-forming sleeve screwing on a shaft-end and terminating in a spacing-head having an inner face of relatively great area with a nipple projecting therefrom into a head-opening, and an outer surface of relatively small area.

SIGMUND L. GOLDMAN.

In presence of—
JOHN WILSON,
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