

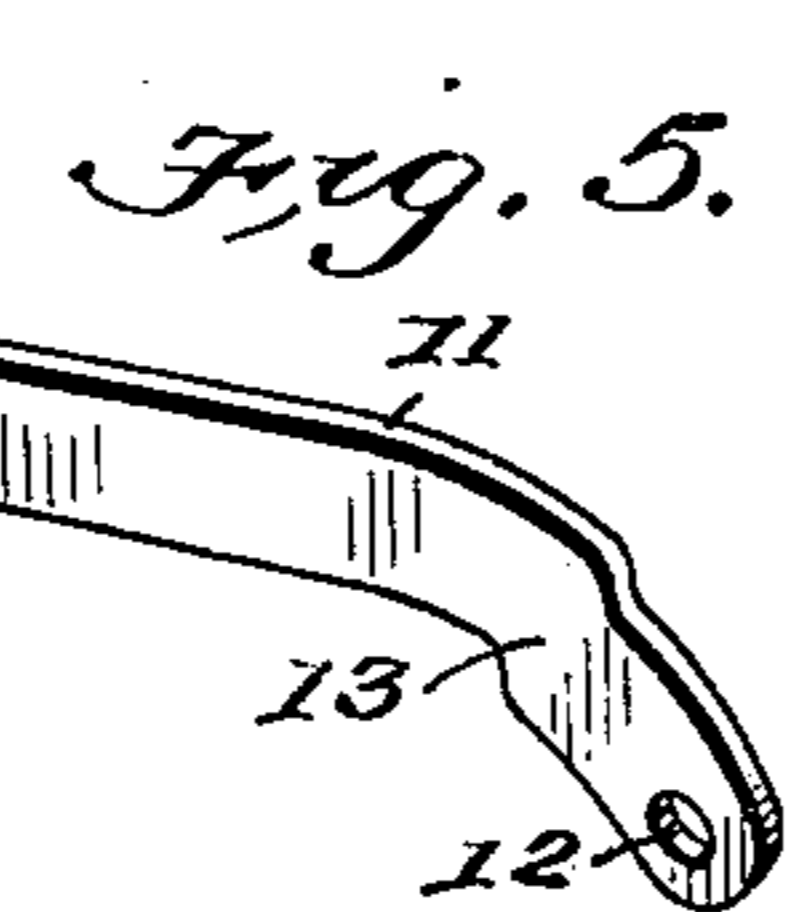
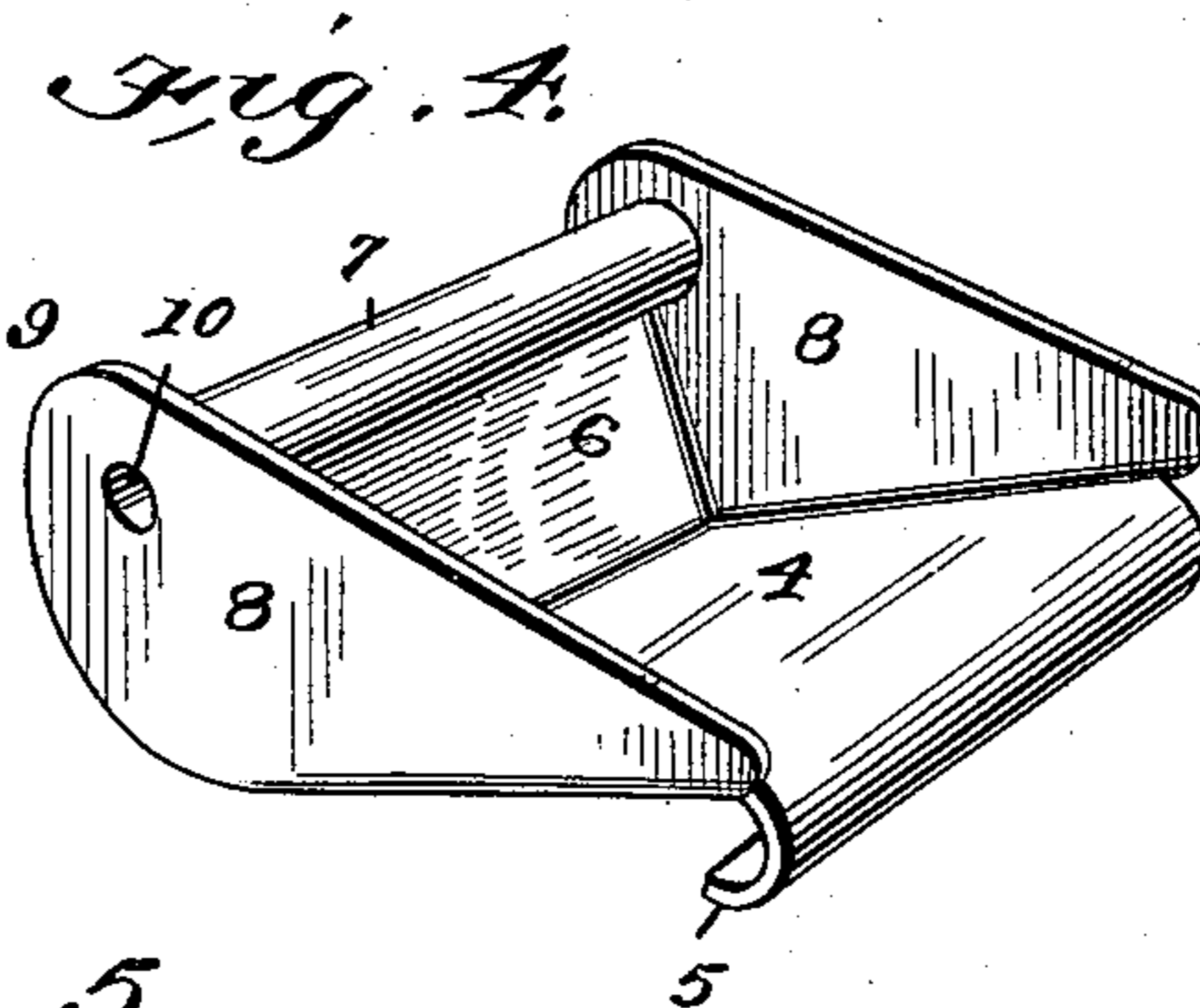
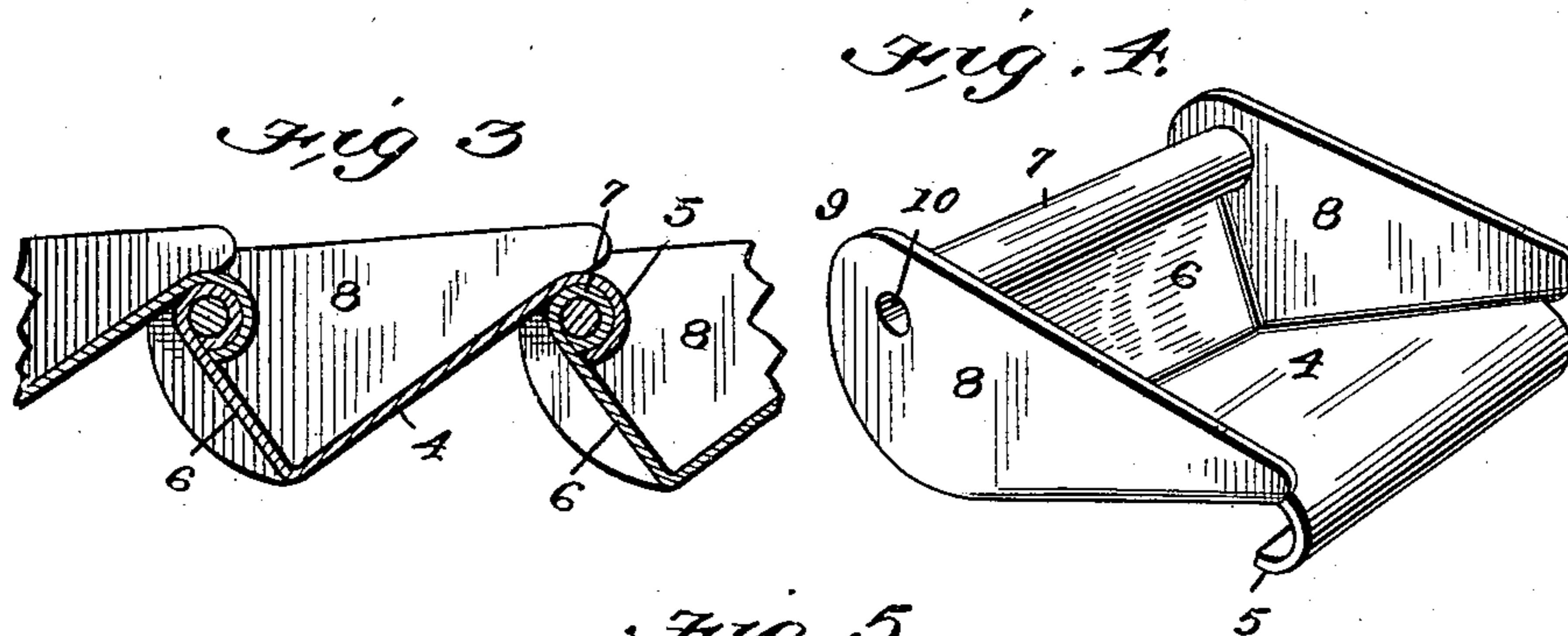
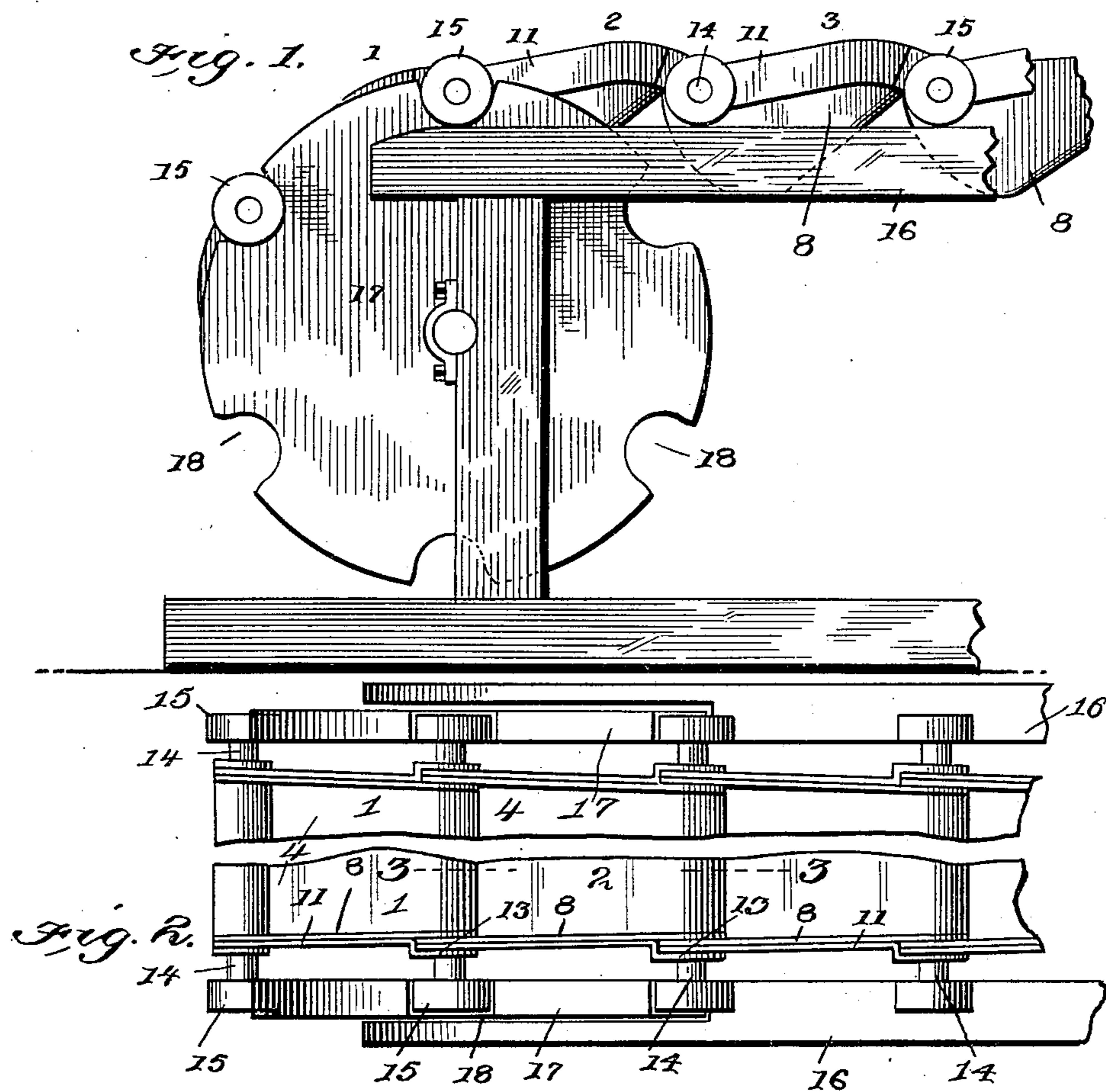
No. 667,192.

Patented Feb. 5, 1901.

W. R. CRAIG.
ORE CONVEYER.

(Application filed Feb. 10, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

WILLIAM ROBERT CRAIG, OF SHELBY, ALABAMA.

ORE-CONVEYER.

SPECIFICATION forming part of Letters Patent No. 667,192, dated February 5, 1901.

Application filed February 10, 1900. Serial No. 4,785. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ROBERT CRAIG, a citizen of the United States, residing at Shelby, in the county of Shelby and State of Alabama, have invented a new and useful Ore-Conveyer, of which the following is a specification.

My invention relates to ore-conveyers, and has for its object to produce a flexible conveyer which can be formed and operated without the use of chains or other than the parts of the conveyer and which will possess great strength and capacity and be of exceedingly simple construction.

With this object in view my invention consists in the improved construction and novel combination of parts of an ore-conveyer, as will be hereinafter more fully set forth.

In the accompanying drawings, in which the same reference-numerals indicate corresponding parts in each of the views in which they occur, Figure 1 is a broken elevation of a portion of a conveyer constructed in accordance with my improved invention. Fig. 2 is a broken plan view of the same. Fig. 3 is a broken sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a perspective view of one of the buckets comprised in my conveyer, and Fig. 5 is a perspective detail view.

Referring more particularly to the drawings, 1, 2, and 3 indicate a series of buckets forming a portion of a conveyer in accordance with my invention. Each bucket is formed from a single piece of suitable sheet metal, the bottom 4 of which has its forward portion or toe bent over or curved to form a hook or toe 5, and the rear or heel portion 6 is bent upwardly at an angle and has its upper edge formed into a sleeve or hollow cylinder 7. The side pieces 8 may be bent up at right angles to the bottom when formed integrally therewith, or they may be suitably riveted or secured thereto in any desired manner when formed separately. The rear portion of each of said side pieces is preferably curved or rounded, as shown at 9, and also perforated, as shown at 10, to register with the bore or hollow of the sleeve 7 when they are turned up against the ends of the heel 6.

In constructing my improved conveyer a sufficient number of these buckets are con-

nected together, so as to form an endless conveyer by hooking the toe portion 5 of one bucket over the hollow sleeve of the preceding bucket, as clearly shown in Fig. 3. If desired, strengthening-pieces 11 may be secured upon each side piece, each end of said piece being perforated, as shown at 12, to register with the successive openings in the side pieces and the intermediate portion being provided with an offset 13 to permit of the different buckets being connected together, as heretofore set forth. After the buckets have been thus connected together in series an axle 14 is passed through each of the sleeves 7 and provided with a wheel or roller 15 at each end, which is adapted to travel upon a suitable track 16 as the conveyer is moved forward. Motion is transmitted to the conveyer by means of suitable master-wheels 17, only one of which is shown in the drawings, which may be journaled to any suitable support and operated from any source of power. The periphery of each wheel is provided with a series of recesses 18, each recess being adapted to receive one of the rollers upon the ends of the axles of the conveyer-buckets. The track 16 is preferably arranged in alinement with the wheels, so that the rollers will advance from the recesses to the top of the track as the wheels are rotated. If desired, the rollers may be supported upon a suitable track in their return movement to the master-wheels, although I have not thought it necessary to show the same, and the idle wheel at the farther end of the track over which the rollers pass at the beginning of the return movement may be of any ordinary construction, and I have not thought it necessary to show it, as the return-track and said wheel form no part of my invention.

As above described, it will be seen that my improved ore-conveyer can be made entirely of metal, thereby possessing great strength with convenience of manufacture and comprising a series of buckets joined together. It possesses great capacity, and as the parts are not liable to be easily disarranged it can be run at a great speed, thereby rendering it very efficient in its operation. By making the buckets substantially V-shaped in cross-

section they are easily filled and as readily emptied without danger of the contents clinging thereto.

Although I have shown my invention embodied in a form which I have found very convenient, yet I do not wish to limit myself to the exact construction therein shown and described, but reserve to myself the right to make such changes and alterations as will adapt it to the different uses to which conveyers are generally applied without departing from the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A bucket for chainless conveyers comprising a bottom, a rear end and two side pieces, the forward end of the bottom being formed into a hook and the extremity of the rear end formed into a cylindrical sleeve, and the sides being each bent up at an angle to the bottom and end and perforated to register with the bore of the sleeve, substantially as described.

2. In a conveyer, the combination, with a series of consecutively-arranged buckets, the bottom of each bucket having its forward end formed into a hook and its rear end provided

with a heel, the edge of the heel being formed into a cylindrical sleeve and each side of the bucket being bent up at right angles to the bottom and end and perforated to register with the bore of said cylinder, of a strengthening-strip secured to each side piece, each end of which is perforated and the intermediate portion provided with an offset, an axle through each, the end of which is provided with a roller, a track for said roller, and means for operating said conveyer, substantially as described.

3. In a conveyer, the combination, with two peripherally-recessed disks, of a track having its ends adjacent to said disks and in the same plane therewith, a conveyer on said disks and track, said conveyer comprising a series of connected buckets, each bucket being provided with a cylindrical sleeve, and an axle through each sleeve, each end of which axle is provided with a roller adapted to fit within the recesses of the wheel and to roll upon the track, substantially as described.

WILLIAM ROBERT CRAIG.

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