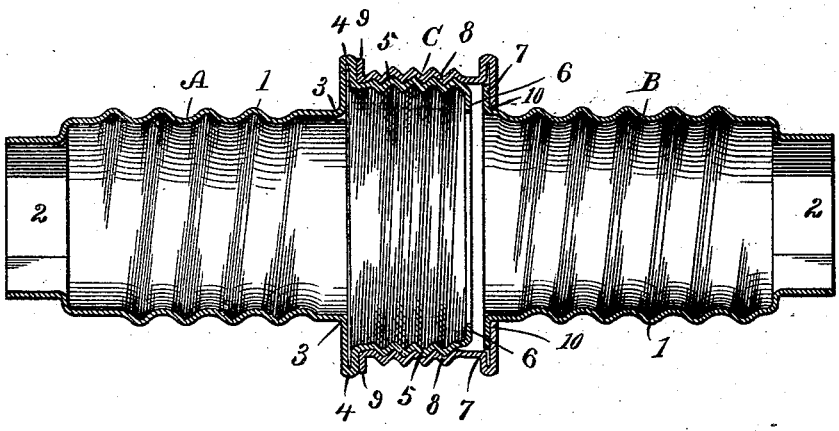
(No Model.)

J. G. HALLAS.

HOSE COUPLING.

No. 454,649. Patented June 23, 1891.



WITNESSES

C. M. Newman,

Ryley I. Munson.

INVENTOR

James G. Hallas

By A. M. Wooster

Atty.

UNITED STATES PATENT OFFICE.

JAMES G. HALLAS, OF WATERBURY, CONNECTICUT.

HOSE-COUPLING.

SPECIFICATION forming part of Letters Patent No. 454,649, dated June 23, 1891.

Application filed November 17, 1890. Serial No. 371,639. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. HALLAS, a citizen of the United States, residing at Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Hose-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to produce a hose-coupling which shall be so constructed as to permit the parts to be drawn from disks of sheet metal. I thus produce a smoother, more finely finished, and more accurately made coupling than has heretofore been practicable where the parts were formed by casting, the cost of production, moreover, being greatly reduced.

With these ends in view I have devised the simple and novel coupling of which the following description, in connection with the accompanying drawing, is a specification, numerals and letters being used to denote the several parts.

The drawing is a longitudinal section of the three parts of the coupling in operative position, the usual packing-washer being omitted.

The three members of the coupling as a whole are denoted by A, B, and C. Members A and B are provided with rounded screw-threads, (denoted by 1,) which are ordinarily formed by rolling and which adapt said members to be turned into the ends of the hose in the usual manner, the elasticity of the hose causing the material thereof to press into and fill the depressions in the rounded threads, thereby effecting a very strong and perfectly water-tight connection and one that can be made at any time by any person and without tools other than a suitable key adapted to engage polygonal portions 2 at the inner ends of the members. The disks are cupped and drawn in the usual manner. After member A (the male member) has been drawn to the diameter required for the coupling portion before the threads are formed, the inner end of the member is reduced and elongated by additional drawing operations, leaving a shoulder, as at 3. The outer end of the shell is then upset endwise, which shortens that portion and forms an outwardly-projecting looped or doubled flange, (denoted by 4,) after which thread 1 and thread 5, which are engaged by member C, are formed. The inner end of the member is formed to polygonal shape, as clearly shown, to adapt it to be engaged by a key, and the bottom is punched out, leaving a polygonal opening, through which the end of the key may be passed in setting the member to place. At the opposite end of this member the metal is turned inward to form a flange 6, against which the usual packing-washer (not shown in the drawing) rests in use. In forming member B, flange 4, the coupling-thread and flange 6 are dispensed with, an outwardly-turned flange 7 being formed at the outer end of the part which is engaged by member C, as will presently be explained, and between which and flange 6 the packing-washer (not shown) rests in use. A polygonal portion 2 is formed at the inner end of this member, and the bottom of the cup is punched out precisely the same as in forming member A. Member C is provided with a thread 8, which engages the coupling-thread 5 on part A with an outwardly-turned flange 9, which in the coupled position rests against flange 4, and with an inwardly-turned flange 10, which engages flange 7 on member B.

In practice flange 10 on part C is formed by upsetting the metal endwise before the bottom of the cup is punched out, so as to make this flange resemble flange 4 on member A, thereby giving a very much neater and more attractive appearance to the coupling.

The operation of attachment to hose is as follows: The key (not shown) is passed through member A from the outer end until the polygonal opening is firmly engaged. The member is then turned to its position in the end of hose by the key. Member B is turned to place in the same manner, the key in this instance passing through both parts C and B from the outer end.

Having thus described my invention, I claim—

1. A three-part hose-coupling all the parts of which are formed from sheet metal, and consisting of a male member A, having a threaded coupling end with an inturned

flange, a member B, having an outwardly-turned flange at its coupling end, and a threaded sleeve C, joining the said members A and B, the parts when assembled having a washer-receiving space between the said flanges.

2. A three-part hose-coupling all the parts of which are formed from sheet metal, and consisting of a male member A, having a threaded coupling end with an inturned flange, and having also an outwardly-extending looped or doubled flange 4, a member B, having an outwardly-turned flange at its coupling end, and a threaded sleeve C, joining the said members A and B, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES G. HALLAS.

Witnesses:
ROSWELL H. BUCK,
W. H. THOMPSON.