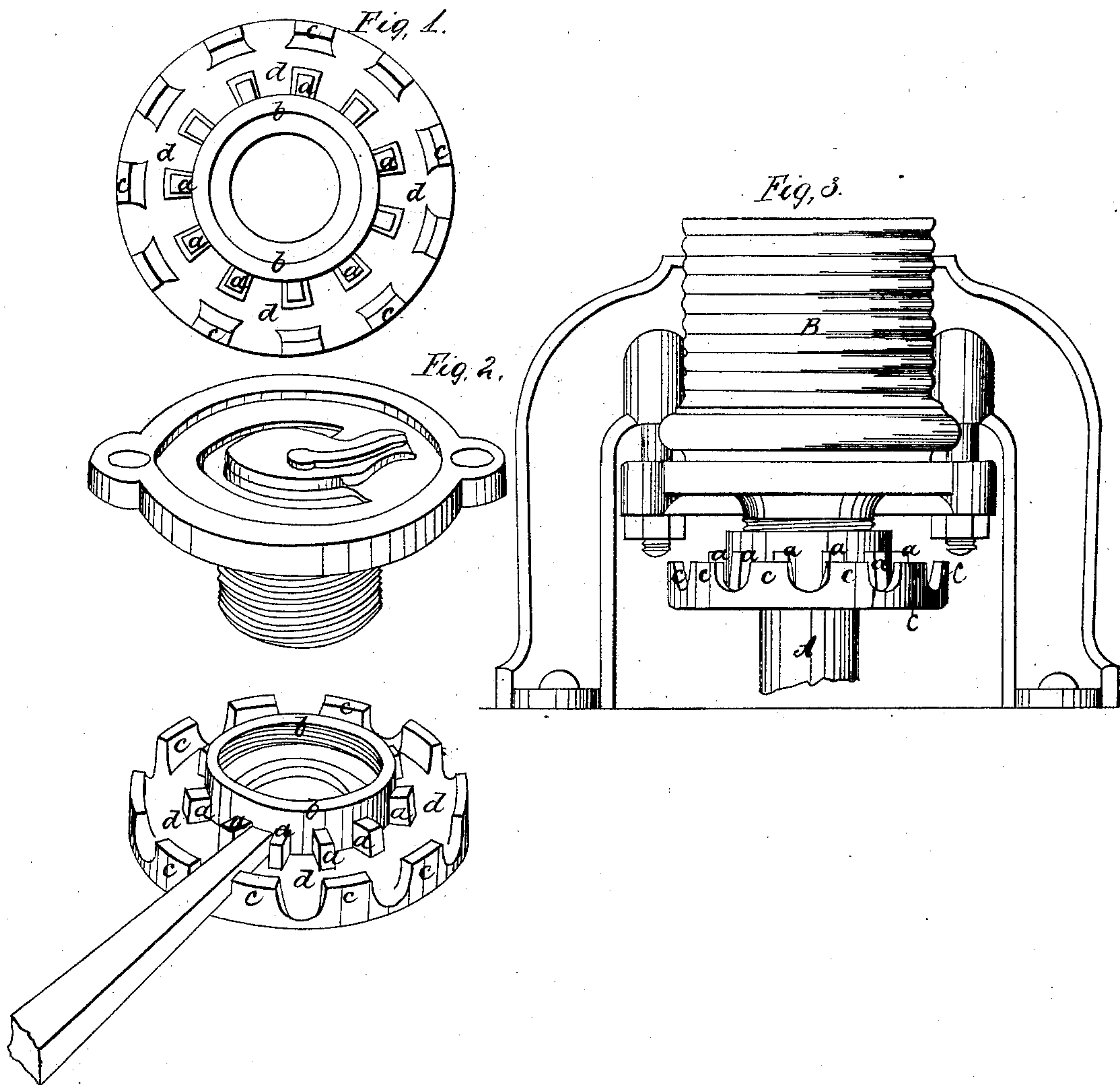


B. Holly,
Hose Coupling-Nut,
N^o 30,648. *Patented Nov. 20, 1860.*



Witnesses,
Smith A. Penfield
James C. Campbell

Birdsall & Co., Inventor,
By his attorney, J. F. Mason.

UNITED STATES PATENT OFFICE.

BIRDSILL HOLLY, OF LOCKPORT, NEW YORK.

HOSE-COUPLING.

Specification of Letters Patent No. 30,678, dated November 20, 1860.

To all whom it may concern:

Be it known that I, BIRDSILL HOLLY, of Lockport, in the county of Niagara and State of New York, have invented a new and Improved Coupling-Nut for Connecting Water-Pipes, Hose and Other Similar Purposes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, like letters being used for corresponding parts in all of the figures.

Figure 1, is a plan view of my improved nut. Fig. 2, is a view in perspective, showing it as detached from the base of the pump, with the method of disconnecting it. Fig. 3 is a view in elevation showing its application to connect a suction pipe A, with the pump.

My improvement is designed more especially for the connection of sections of hose and other pipes, together, and with pumps, hydrants, engines, boilers, &c., so as to dispense with the use of a wrench in the act of connecting or disconnecting, thereby facilitating the operation, and adapting it to those emergencies in which a wrench is not easily attainable.

It is formed, as represented in the drawings, with a series of teeth or cogs, *a a*, surrounding the outer surface or hub of the nut

proper, *b* being the threaded portion thereof. Below these teeth a rim or flange *d* projects horizontally outward, having at its periphery upturned points or merlons, *c*, between the embrasures of which may be inserted the end of any piece of iron or other material of suitable size and strength until it is received in the meshes of the teeth *a*, when the nut may be readily turned in either direction with as great facility as if a perfectly fitting wrench were employed.

As great difficulty often arises from not having a suitable wrench at hand with which to turn so large a nut, this construction effects a great convenience, often preventing damaging delays, as well as saving the expense of a wrench, as some article suitable to the purpose can always be found.

The distance between the teeth *a* and points or fulcrum *c*, makes so little power necessary that a very slender lever and slight exertion will effect the object.

What I claim as my invention and desire to secure by Letters Patent is—

A nut constructed with gears or teeth *a*, and fulcrum *c*, surrounding its hub or center, substantially in the manner and for the purposes herein shown and described.

BIRDSILL HOLLY.

Witnesses:

S. HOPKINS,
WALTER SIMMONS.