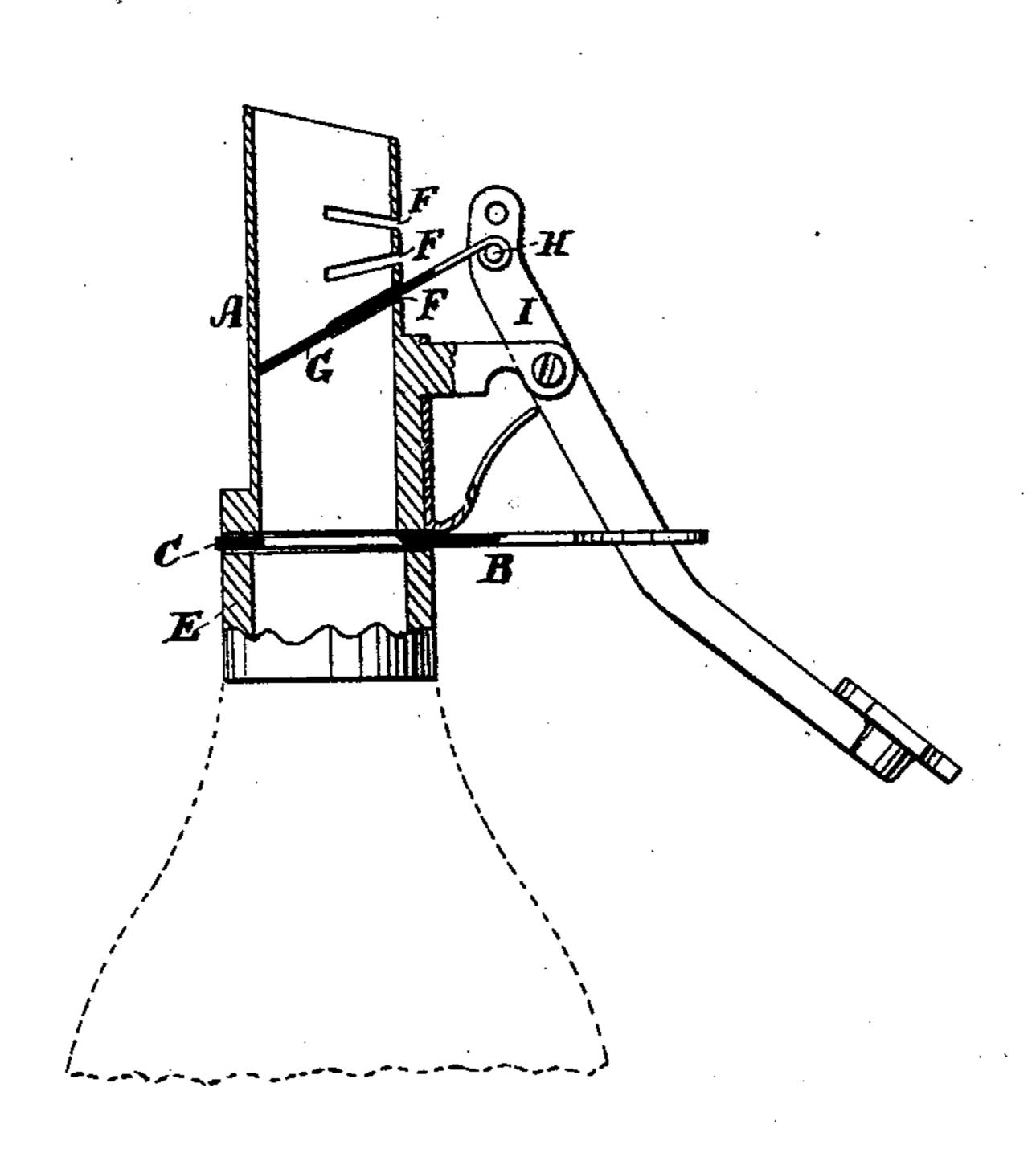
## J. S. LONG.

## Shot-Chargers for Shot-Pouches.

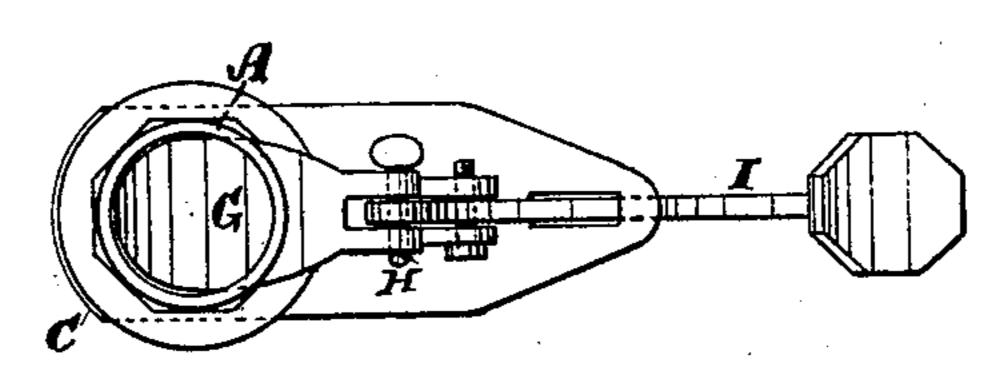
No. 166,791.

Patented Aug. 17, 1875.

Jig.1.



Jig. 2.



WITNESSES:

A Bennewaendorf Atterry John Trong

BY

municipality

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

JOHN S. LONG, OF ELKVILLE, ILLINOIS.

## IMPROVEMENT IN SHOT-CHARGERS FOR SHOT-POUCHES.

Specification forming part of Letters Patent No. 166,791, dated August 17, 1875; application filed May 22, 1875.

To all whom it may concern:

Be it known that I, John Shannon Long, of Elkville, in the county of Jackson and State of Illinois, have invented a new and Improved Shot-Charger, of which the following is a specification:

My invention consists of a steel cuttingvalve with a cleaning-ring at the lower end, working through a chamber, which is enlarged on one side of the valve, so as to give clearance to the shot as they are divided without pinching on the blade.

My invention also consists of a series of slots in the upper portion of the barrel for gaging different charges, arranged radially to the pivot-hole of the lever, to which the valve is connected, which allows of arranging them farther apart for a wider range of variation than can be had when they are not so arranged, and the charges can be graduated small enough for guns of small caliber, and at the same time the proper size of barrel may be preserved to insure the free inlet and outlet of large shot, and also the required movement of opening and closing is preserved.

Figure 1 is a sectional elevation of my improved charger, and Fig. 2 is a top view.

Similar letters of reference indicate corre-

sponding parts.

A is the barrel, in which is the steel cuttingoff valve B with the cleaning-ring C, and below the blade is the enlargement E on the side against which the valve closes, giving clearance for the escape of the shot that may be in front of the cutting-edge when it closes, and the cleaning-ring keeps the slot in which the blade closes from clogging by forcing out

any small shot that may chance to be pressed in. F represents the slots for the gagingvalve G, which are arranged radial to the pivot H, by which the valve is jointed to the lever I, thus enabling the valve to be shifted through a greater range than it could be, and at the same time have the requisite sweep in opening and closing, if the slots were parallel.

When the charger is ready for use it is full of shot, and in delivery some must be cut through where they are in line with the edge of cut-off valve. The larger the shot the more will be cut, while with very small shot few, or scarcely any, will be. Hence, my cut-off is made with a concavity and sharp edge, while those now in use are convex with a blunt edge; mine cuts through the shot in line while they push, roll, and jam the shot. The barrel forms the guide that keeps the cutting parts in line, while my lever slides in the upper end of cutoff valve, and depends upon the barrel to steady it.

Having thus described my invention, I claim as new and desire to secure by Letters Patent--

1. The cut-off valve B, having a cleaningring, C, in combination with the barrel A, having an offset, E, under the valve on the closing side, substantially as specified.

2. The series of slots F for the gaging-valve G, arranged radially to the point of connection of the valve with the lever, substantially as specified.

JOHN SHANNON LONG.

Witnesses:

WILLIAM G. SPILLER, GREEN B. DAVIS.