

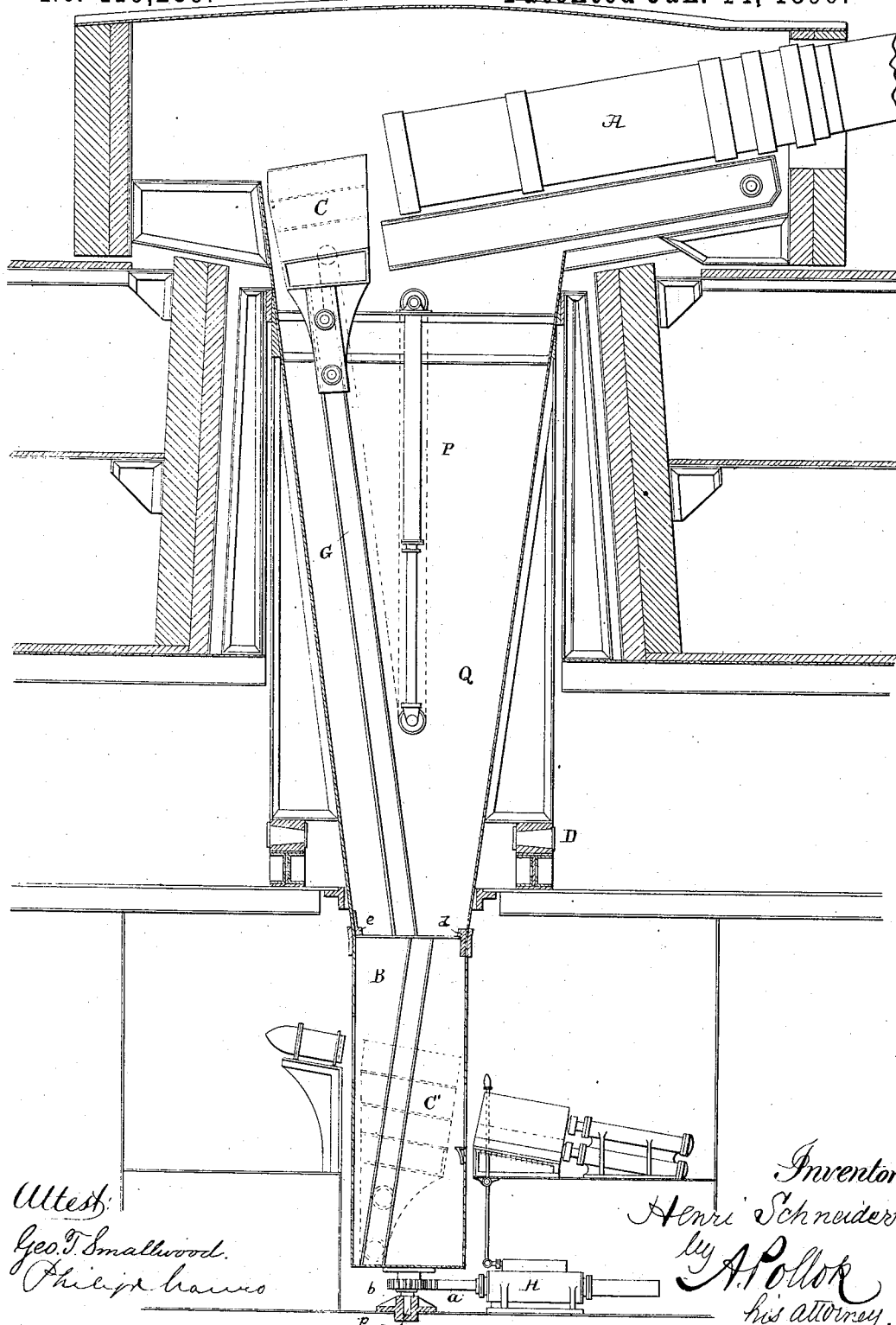
(No Model.)

H. SCHNEIDER.

APPARATUS FOR TRANSPORTING AMMUNITION FROM THE MAGAZINES
OF VESSELS TO GUNS IN THE TURRETS.

No. 419,289.

Patented Jan. 14, 1890.



Attest:
Geo. T. Smallwood.
Philip H. Harris

Inventor:
Henri Schneider
by A. Pollak
his attorney.

UNITED STATES PATENT OFFICE.

HENRI SCHNEIDER, OF LE CREUZOT, FRANCE.

APPARATUS FOR TRANSPORTING AMMUNITION FROM THE MAGAZINES OF VESSELS TO GUNS IN THE TURRETS

SPECIFICATION forming part of Letters Patent No. 419,289, dated January 14, 1890.

Application filed November 10, 1888. Serial No. 290,476. (No model.) Patented in France July 16, 1888, No. 191,812.

To all whom it may concern:

Be it known that I, HENRI SCHNEIDER, manager of the firm of Schneider et Cie., of Le Creuzot, (Saône-et-Loire,) in the Republic of France, manufacturers, have invented an apparatus for transporting ammunition or charges and projectiles from the magazine in ships or vessels to the level of the breeches of the guns in the turrets, (which has been patented in France by Patent No. 191,812, dated July 16, 1888,) of which the following is a specification.

This invention relates to apparatus for transporting ammunition or charges and projectiles from the magazine in ships or vessels to the level of the breeches of the guns in the turrets. These apparatus, being arranged and operating as hereinafter described, possess the advantage of taking up a minimum of space in the lower part of the vessel.

In order that my said invention may be fully understood, I shall now proceed more particularly to describe the same, and for that purpose shall refer to the annexed drawing, the same letters of reference indicating corresponding parts.

The accompanying drawing represents in vertical section a turret provided with elevating apparatus according to this invention. This turret carries a gun A and is provided with an elevator consisting of a cage or ammunition-platform C and a hydraulic press P, combined with a chain and pulleys for raising and lowering the elevator-cage in the ordinary manner. This elevator works in a well Q, made in two portions, the upper portion being attached to the lower and extending downward as far as the deck immediately above the magazine, the communication with the latter being completed by means of the lower portion in the form of a tube B, carrying the lower portions of the elevator-guides and capable of rotating on a vertical axis independently of the turret and upper part of the well. A double-acting hydraulic press H imparts rotary motion in both directions to the tube B by means of a rack *a* and a pinion *b*, the latter being fixed on the pivot or vertical axis *p* of the said tube. The tubular part B of the well carries a stop *d* and the conical part Q carries a stop *e*, which is in the path of stop *d*, and the stops are so arranged that

the independent rotation of the tube B from right to left will be arrested at the point where the guideways for the cage C on the two parts of the well are in alignment. In operation, when the turret is turned from left to right, the stop *e* pushes against stop *d*, and thus the tube B is carried around with the part Q, the guideways being in line for the descent of the cage. When the latter has descended, the part B can be turned so as to bring the cage to the position indicated at C' in dotted lines to receive its load. The part B is then turned back by the press H until it is arrested by the action of stops *d e*, which will always be at the point at which the guideways coincide, irrespective of the position of the turret.

The action of this apparatus is as follows: Assuming the gun to be loaded and the cage C of the elevator lowered to the bottom of the tube B, this tube is caused to revolve by suitably manipulating the distribution-valves of the press H until it is placed in a suitable position for loading the cage, this being the position of the tube B indicated in the drawing. The cage having been loaded, the valves of the press are shifted or reversed and the tube B again revolves, but in the opposite direction, until its guides coincide with those in the well Q. The tube is automatically stopped by the aforesaid stop on the turret when in this position, in which it remains, partaking of the movements of the turret, which is supported by and works on rollers D. The cage C is then ready to be elevated when required to reload the gun.

The apparatus illustrated in the accompanying drawing by way of example is applied to a one-gun turret; but it is evident that the improved arrangements may be applied to turrets of any other arrangement or construction carrying any number of guns.

I claim as my invention—

1. The combination, with the revolving turret, of the cage, the divided well having ways or guides for the cage, the upper portion of the well being carried by and rotating with said turret and the lower portion being pivoted and capable of rotating independent of the upper portion, and means for operating the cage and revolving the lower portion of the well, substantially as described.

2. The combination, with the turret, of the

divided well, the lower portion thereof being pivoted, so as to rotate independently of the turret and the upper part of the well, the cage, the guides or ways therefor, the means for revolving the lower portion of the well, and stops for arresting the same when the guides on the two portions of the well coincide, permitting the descent of the cage, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRI SCHNEIDER

Witnesses:

CHARLES BRÉNON,
LÉON FRANCKEN.