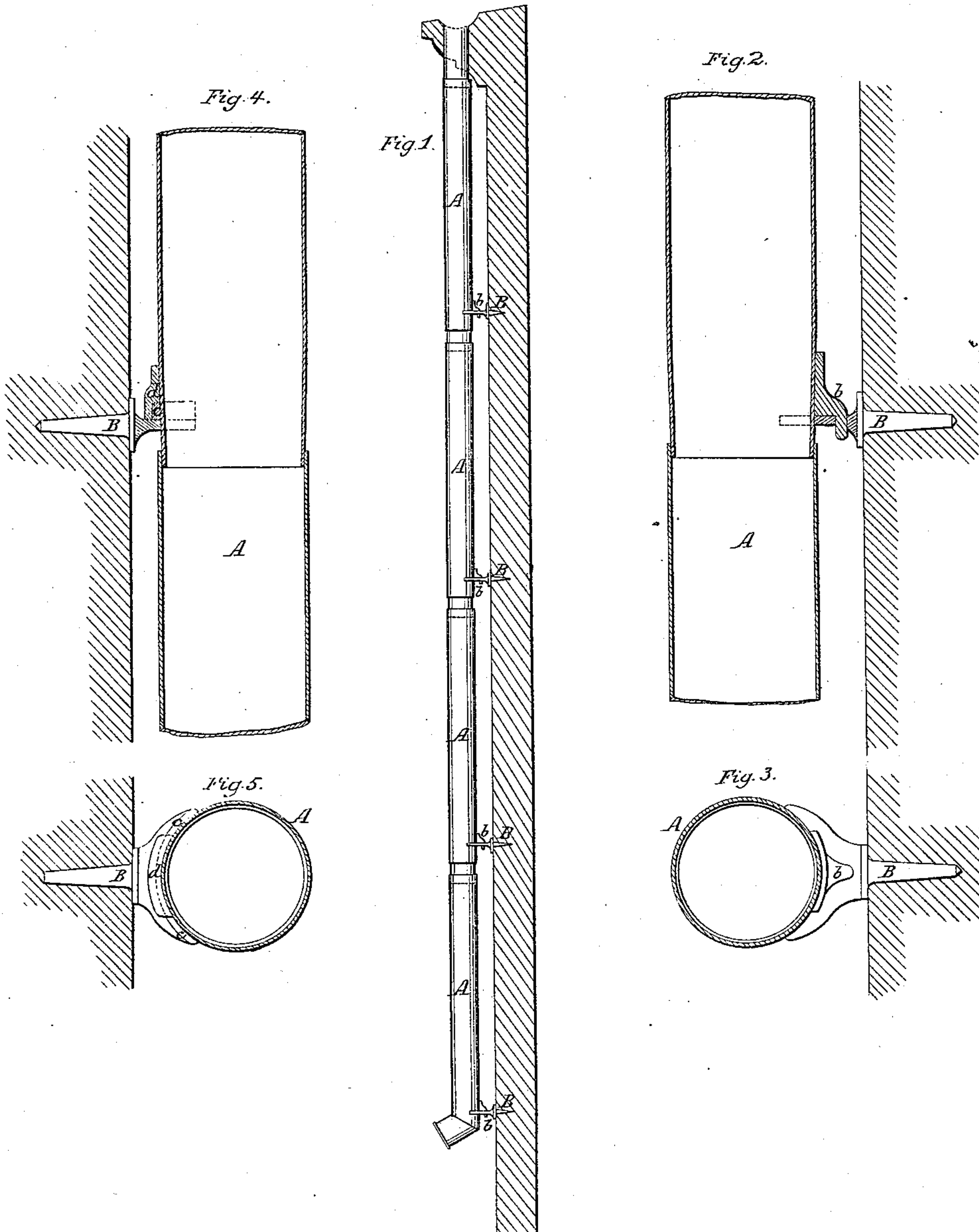


W. Austin,
Eaves Trough,
Patented July 3, 1860

N^o 28,954.



Witnesses
Thodore Bergner
Alexr. Martin

Inventor
Wm Austin

UNITED STATES PATENT OFFICE.

WILLIAM AUSTIN, OF PHILADELPHIA, PENNSYLVANIA.

ATTACHING WATER-PIPES TO BUILDINGS.

Specification of Letters Patent No. 28,954, dated July 3, 1860.

To all whom it may concern:

Be it known that I, WILLIAM AUSTIN, of the city of Philadelphia and State of Pennsylvania, have invented a new and Improved
5 Method of Attaching Water-Pipes to Buildings; and I do hereby declare the following to be a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference
10 marked thereon.

The nature of my invention consists in an improved manner of attaching water pipes to the walls of buildings, it being so contrived as to permit the removal of any one
15 section or "joint", without either disturbing the remainder or in any way disturbing or injuring the wall. With the ordinary mode of attachment this is impossible and the repairing of any leaking joints connected
20 with even more difficulty than the putting up of new pipe.

To enable others skilled in the art to make and use my invention I will now proceed to describe its construction and operation.

25 On reference to the drawing which forms a part of this specification and in which the same letters of reference allude to similar parts throughout the several views: Figure 1 is an elevation of 4 joints of water pipe,
30 showing my improved method of attachment. Figs. 2 and 3 are enlarged views of the improved parts, and Figs. 4 and 5 are views of a modification of the same.

35 A, A are four joints of waterpipe, (Fig. 1,) being so united that the lower end of one shall fit inside of the upper end of the next lower joint. Into the wall are driven at proper intervals the bolts B, B, which are so shaped as to embrace nearly half the di-
40 ameter of the pipe, and provided with holes

for the reception of locking pins *b, b*, on the lower end of joints A, A. On reference to Figs. 2 and 3 this arrangement will be fully understood and from the same views it will also be seen that any joint may be
45 easily removed by first raising it high enough to disengage its dowel pin *b* from A and by doing this raising the lower end of the joint above the top of the next lower one, thus permitting its being drawn sufficiently
50 to one side to allow its final downward removal from the joint above.

Figs. 4 and 5 represent a modification of the above described manner of securing the joints to the bolts B, B, the latter being in
55 this case provided with a projection *c* on its upper side, which, following the circle of the pipe, is overlapped by the piece *d*, thus forming a strong and simple method of
60 attachment.

It will be easily understood, that still further modifications of the above described locking arrangements may be substituted and I therefore desire it to be understood,
65 that I do not intend to confine myself to the described construction of those parts in every minutia; but

What I do claim and desire to secure by Letters Patent is:

The herein described method of attaching
70 water pipes to buildings, whereby any one joint may be removed or replaced without either injuring the wall or disturbing the remainder of the joints, the whole being constructed and operating substantially as set
75 forth.

WM. AUSTIN.

Witnesses:

THEODORE BERGNER,
ALEXR. MARTIN.