

UNITED STATES PATENT OFFICE.

WILLIAM H. SHORT, OF BROOKLYN, NEW YORK.

INLET FOR SEWERS.

Specification of Letters Patent No. 32,008, dated April 9, 1861.

To all whom it may concern:

Be it known that I, WILLIAM H. SHORT, of the city of Brooklyn, county of Kings and State of New York, have invented a new and useful Improvement in Basin-Heads for Sewers; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, forming a part of this specification, in which—

Figure 1 is a vertical section taken through the line *xx* of Fig. 2, which is a plan view; Fig. 3 is a vertical section taken through the line *yy*, of Fig. 4, which is a horizontal section; Fig. 5 is a perspective view of the trap-box; Fig. 6 is a perspective view of the mud-sill; Fig. 7 is a perspective view of the arched curb.

Similar letters refer to like parts in all the figures.

The nature of my invention consists of a cast iron "basin-head" for sewers formed of a trap-box, grated-mud-sill, and arched curb constructed as hereafter fully described.

My "basin-head" forms part of the curbing of the side-walk united in a peculiar manner with the grated-mud-sill and the trap-box. It can be laid in place with great facility; it affords great convenience for cleaning out the sewer-basin, and it contains provision for quickly replacing any one of its parts, at but small expense, if it should become damaged.

To enable others skilled in the art to make and use my invention I will proceed to describe it as clearly and succinctly as possible.

The "basin-head" of a sewer is that part which conducts the water from the gutter in the street down into the basin.

In Figs. 1 and 2 A, represents the sewer basin with its mud-pocket C, and the lateral sewer B. These are represented to explain the application of the invention, but form no part of it, and need not be further mentioned. Common "basin-heads" are generally placed at the corners of streets. Each has an open throat leading under the side walk; it is arched over with a granite or stone flag cut so as to conform to the curve of the street-corner; the throat has usually one, two and sometimes more wrought iron bars secured to the jambs or sides. Some "basin-heads" have perforated plates set in the gutter. A trap-door is usually set in the

side-walk for access to the basin for the purpose of cleaning it out.

My invention is entirely different both as it relates to the material of which it is made and its entire construction.

D, Fig. 5 is that part of my "basin-head" which I call the trap-box. It is cast with a bottom flange *f*, vertical sides *e*, *e*, and a shoulder *g*, *g*, at the back side. *h* is a ledge cast on the inside near the top edge, as shown by the dotted lines in Figs. 2, 4 and in the open view Fig. 5. A recess, or vertical space *i*, *i*, is provided in the ledge *h*.

E, Fig. 6, is the grated-mud-sill. It is cast in one piece with vertical bars *b*, *b*, *b*, the sill *d*, and a ledge *l*; *k* is a vertical prolongation of the sill at each side. The mud-sill fits into the trap box, being proportioned and cast for this object. The prolonged projections *k*, *k*, fit into the slits or recesses *i*, *i*, like keys, and the bottom of the sill *d*, rests upon the two back parts *h'*, *h'*, of ledge *h*. By this arrangement of these two parts and their special construction, the trap-box and mud-sill are firmly combined together. The ledge *l*, on the mud-sill forms the inner bearing for the ridged plates—usually called the pan—and the ledge *h*, *h*, of the trap-box forms the side and front rest or bearings of the pan F which in my "basin-head" forms the lid or trap-door of the sewer basin. This pan is formed in two parts with a key hole in each for the purpose of easy handling—to put it on and lift it off—as required. It may be cast in one piece. It is of such a thickness as to be flush upon its face with the upper edge of the sides *e*, *e*, of the trap-box, when it is laid down in place.

G, Fig. 7, is the arched-curb. It is cast with recesses *r*, *r*, into which the grate-bars *b*, *b*, of the mud-sill fit and are inserted. It has also a yoke *z*, *z*, at each side so formed as to fit snugly over the upper edge of the sides of the trap-box in front of the two shoulders *g*, *g*. H is an arched and rounded cap united to, and forming part of the curb. I intend to cast it with a flange on its back part to rest upon the top of the brick-work of the basin.

This "basin-head" is formed of four distinctive parts composed of separate castings but forming one united whole when put together.

The trap-box D, is placed upon the top

of the brick-work of the basin, in such a situation that its upper edge and the plate or pan F are in the gutter and forming part of outside of the curb. The mud-sill is secured in and to the trap-box as has been described, and the curb G is placed upon the trap-box and keyed to it by the grate bars secured in the recesses *r, r*; and the yokes *z, z*; firmly braced to the shoulders *g, g*; as shown in Figs. 3, and 4; thus forming my cast iron "basin-head." The curb G forms the curb of the pavement, and every bar of the grate forms a support to it, as well as the two sides of the trap box.

By forming my "basin-head" in separate parts, they can be easily handled, and if one part becomes injured, it can easily be replaced without much expense. The basin pan being outside of the sidewalk and in the gutter, it allows of the basin being cleaned, without obstructing foot passengers, or carriages. The flagging of the sidewalk is laid behind the curb on the top of the arch cap H. This "basin-head" is adapted for any part of a street, as well as the corner. For a straight part of the side-walk the curb G instead of being cast curved, will be cast to conform with the general curb of the street.

My cast iron "basin-head" possesses many advantages over the common kind. It can be laid down more quickly and at less cost than the common stone arches, with iron grate bars secured in the jaws. It also forms

a much neater job at the corner of a side walk, and its trap-box being in the gutter, it is more suitably located for cleaning the basin. 35

So far as I have been able to ascertain, I am not aware of a "basin-head," ever having been made with a cast iron trap-box like the one represented; or of such a box ever having been combined with a cast iron mud-sill forming part of the support to the pan or cover, as shown and described; or of a "basin-head" forming a portion of the curb, as a combined casting of the same material. This "basin-head" would be equally new and my invention, if the trap-box and mud-sill, were cast in one piece, also the curb. 40 45 50

Having thus described my invention, I do not wish to be understood as claiming my cast-iron "basin-head" as a substitution of one material for another, but as an entirely new article, device, or apparatus for the purpose. 55

I therefore claim—

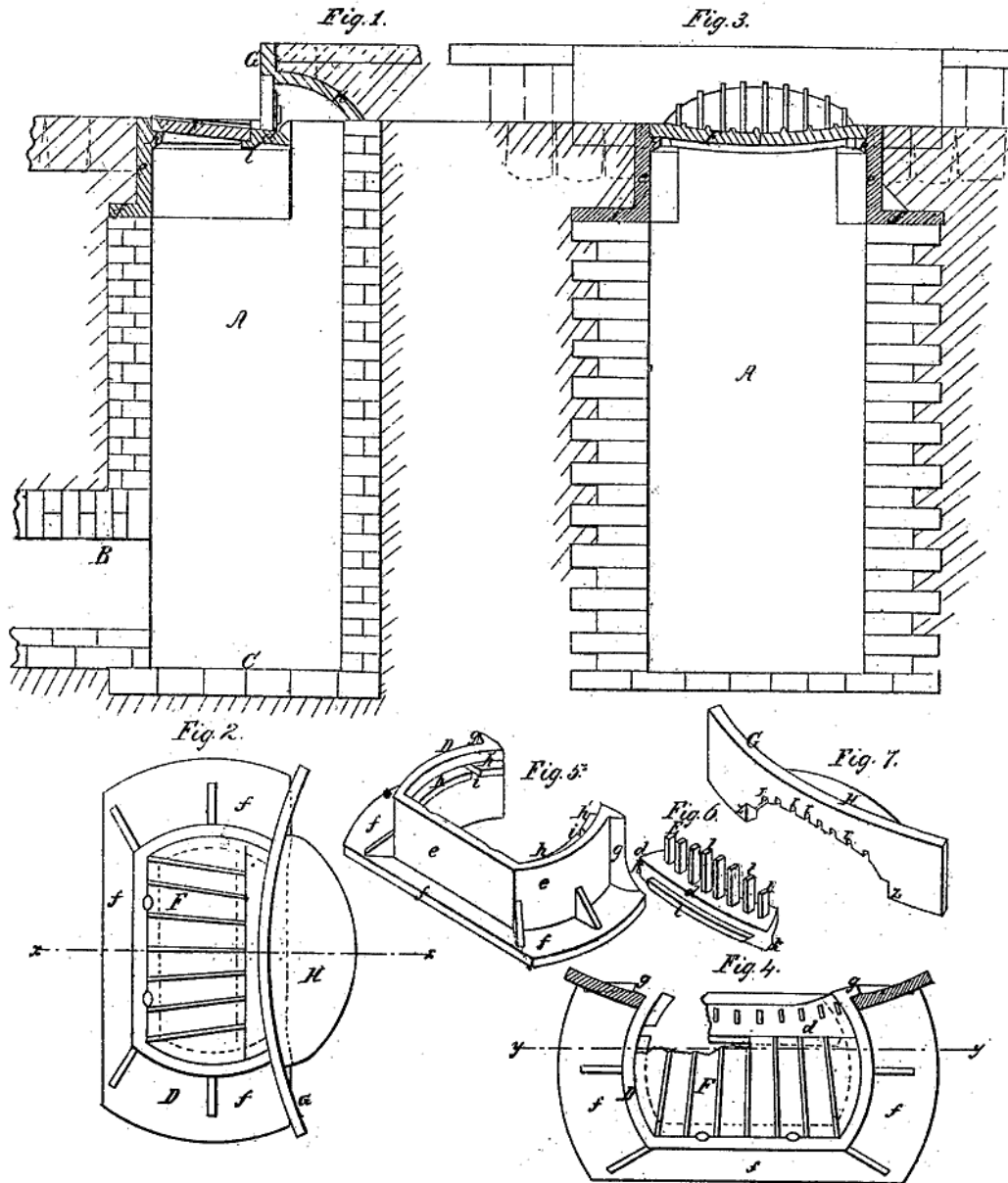
The cast-iron "basin-head" formed of the trap-box D, the mud-sill E, and arched curb G, constructed and combined in the manner substantially as described for the purposes set forth. 60

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