J. HICKSON.

REINFORCED METAL FLANGED CONCRETE PIPE.

APPLICATION FILED MAY 26, 1911.

1,009,840. Patented Nov. 28, 1911.

Fig. 1.

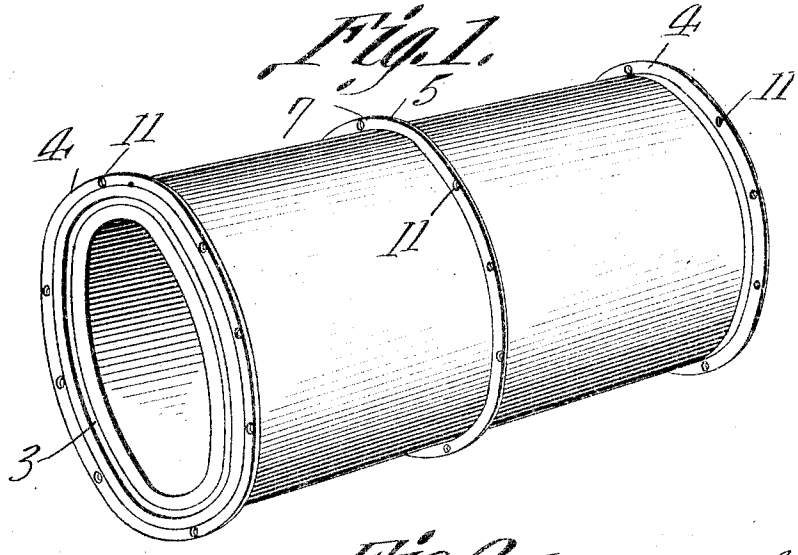


Fig. 2.

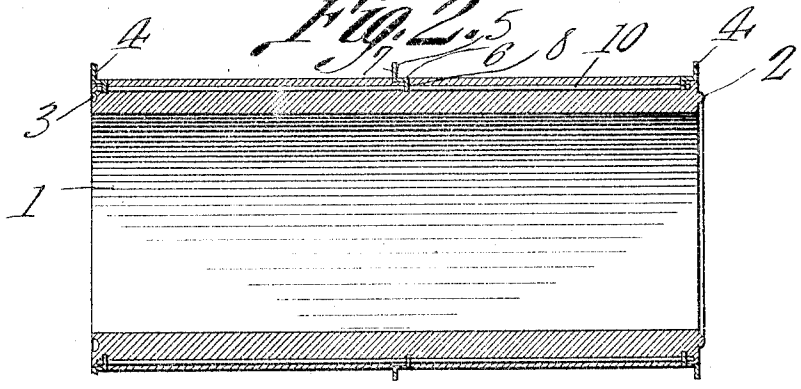
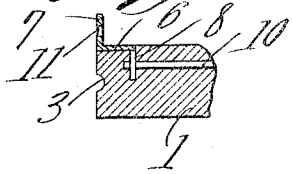


Fig. 4.



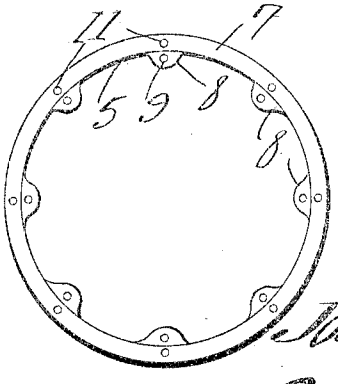


Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH HICKSON, OF MOUNT GILEAD, OHIO.

REINFORCED METAL-FLANGED CONCRETE PIPE.

1,009,840. Specification of Letters Patent. Patented Nov. 28, 1911.

Application filed May 26, 1911. Serial No. 629,737.

To all whom it may concern:

Be it known that I, JOSEPH HICKSON, a citizen of the United States, residing at Mount Gilead, in the county of Morrow and State of Ohio, have invented a new and useful Reinforced Metal-Flanged Concrete Pipe, of which the following is a specification.

It is the object of the present invention to provide a monolithic pipe, having novel means for reinforcing the pipe, and novel means whereby one section of pipe may be assembled with another section of pipe.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings,—Figure 1 shows the invention in perspective; Fig. 2 is a vertical longitudinal section; Fig. 3 is an elevation of one of the securing bands; and Fig. 4 is a sectional detail enlarged from Fig. 2.

The pipe herein disclosed consists of a tubular body portion 1, preferably fashioned from concrete. In one end of the body 1 there is an outstanding bead 2, annular in form. In the other end of the body 1 there is an annular recess 3. The construction is such that the bead 2 of one section of pipe will register in the recess 3 of the next adjoining section of pipe, thus affording a fluid tight joint between the sections.

The body 1 is surrounded at its ends, with reinforcing bands, denoted generally by the numeral 4 in Fig. 1. Intermediate its ends, the body 1 is surrounded by one or more supplemental bands, one of which is shown in Fig. 1, and denoted generally by the numeral 5. The bands 4 and 5 are identical in construction, and but one of them will be described, it being understood that the description applies, with equal propriety, to the other bands. Each band, then, consists of a body portion 6, from one edge of which upstands a continuous flange 7. Upon the opposite edge of the body 6, is a plurality of lugs 8. When the several bands 4 and 5 are placed upon the body 1, the outer faces of the portions 6 of the bands will lie flush with the outer face of the body 1, the lugs 8 projecting into the body 1, and the flanges 7 outstanding beyond the body 1. In the case of the bands 4 which are at the ends of the pipe, the outer faces of the flanges 7 are disposed flush with the end faces of the body 1, as seen most clearly in Fig. 4. The lugs 8 are equipped with openings 9 in which are mounted reinforcing members 10, preferably taking the form of rods. These rods 10 terminate short of the ends of the body 1, and thus the rods 10 are housed entirely within the contour of the body 1. In the outstanding flanges 7 of the bands 4 and 5, there are openings 11, alined longitudinally of the structure. The construction is such that when the flange 7 of the end band 4 of one section is in abutment with the flange 7 of the end band 4 of another section, bolts or the like, may be passed through the openings 11 in the said end bands 4, thus securing the pipe sections together, and maintaining the beads 2 in the recesses 3. Or, if desired, the strap bolts may be extended the full length of the section, through the openings 11 in the bands 4 and 5, for the purpose of securing the sections together.

Obviously, the bands 4 and 5, together with the rods 10, constitute a means for reinforcing the pipe, the bands 4 constituting, at the same time, a means whereby adjacent pipe sections may be terminally united. Owing to the fact that each band is provided with the lugs 8, instead of a continuous flange, the continuity of the pipe is broken at spaced points only, and thus the strength of the pipe is enhanced.

Having thus described the invention, what is claimed is:—

A device of the class described comprising a body; bands surrounding the body at spaced points, each band consisting of a central portion, the outer face of which is flush with the outer face of the body, a flange outstanding from one edge of said central portion, and spaced lugs extended into the body from the other edge of said central portion; and reinforcing elements mounted in the lugs and extended longi-

tudinally of the body, the reinforcing elements being located nearer to the outer face of the body than to the flow-line of the body; the band being fashioned from a single strip of material of equal thickness throughout.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOSEPH HICKSON.

Witnesses:
A. L. WHITE,
CARL BULER.