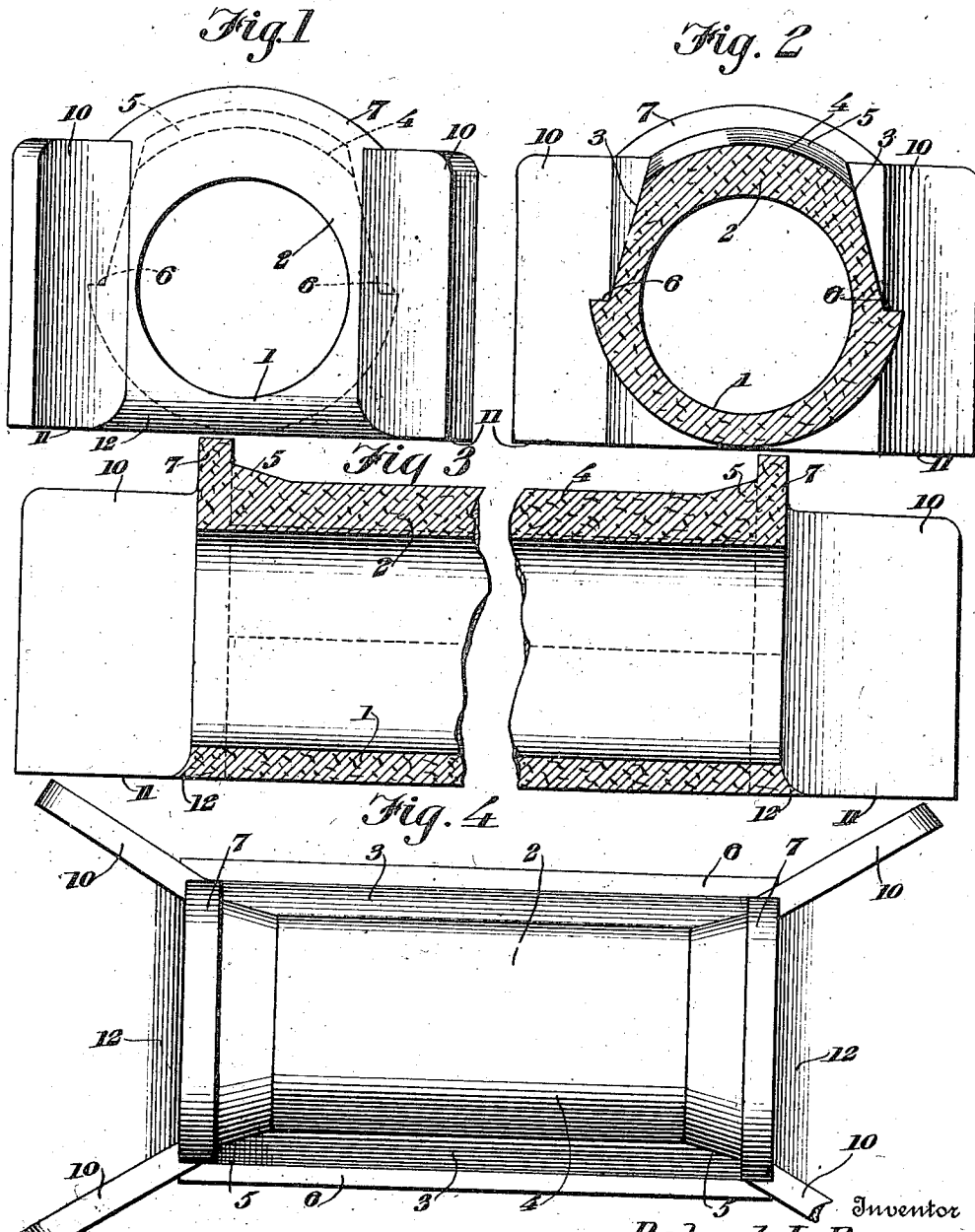


R. J. BURNS.
CONCRETE CULVERT.
APPLICATION FILED MAR. 31, 1911.

995,659.

Patented June 20, 1911.



Witnesses
allgades
A. L. Hamham.

Inventor
Robert J. Burns
Geo. W. Sule
Attorney

UNITED STATES PATENT OFFICE.

ROBERT J. BURNS, OF HEWITT, OKLAHOMA.

CONCRETE CULVERT.

995,659.

Specification of Letters Patent. Patented June 20, 1911.

Application filed March 31, 1911. Serial No. 618,086.

To all whom it may concern:

Be it known that I, ROBERT J. BURNS, a citizen of the United States, and a resident of Hewitt, in the county of Carter and State of Oklahoma, have invented certain new and useful Improvements in Concrete Culverts, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to certain new and useful improvements in concrete culverts.

The primary object of my invention is to provide a strong, comparatively inexpensive culvert, to serve as a transverse train or 15 waterway under country roads, railroad beds and the like.

Another object is to provide a culvert, with an earth holding top flange and two divergently extending wings, serving as retaining walls at each end of the culvert. 20

With these and other objects in view the present invention consists in the combination and arrangement of parts as will be hereinafter more fully described and finally 25 pointed out in the appended claim, it being further understood that changes in the specific structure shown and described may be made within the scope of the claim, without departing from the spirit of the invention. 30

In the accompanying drawings forming a part of this specification, and in which like numerals of reference indicate similar parts in the several views: Figure 1, shows an end 35 view of a culvert constructed according to my invention showing the same in position. Fig. 2, shows a transverse sectional view. Fig. 3, is a longitudinal sectional view, and Fig. 4, a top view.

40 In my present invention I provide a concrete culvert which is preferably made directly in the cut or at the point where the conduit is finally to rest. A road culvert should be so constructed that it will withstand the heaviest load which is likely to 45 pass over the same, while also including features insuring the water being carried

through the culvert without washing away the side earth or draining under the culvert.

A tubular culvert including the above desirable features, I show in the accompanying 50 drawings in which the numeral 1, designates the lower half of the culvert and the numeral 2, the upper half. The culvert is of a suitable length and is traversed from end 55 to end by a cylindrical drain opening. As shown in Fig. 2, the upper half of the conduit is of a greater thickness than the lower half and has its opposite faces 3, flattened, the upper half being arched from the flat 60 faces 3, as shown at 4.

As disclosed in Fig. 2, a narrow lengthwise running ledge 6, is formed at the base of each flattened side 3, these ledges 6, 65 assisting in retaining the earth and holding and supporting the earth adjacent to the faces 3. The culvert at each upper end is slightly enlarged as shown at 5, in Fig. 3, and each upper end is further provided with a skirting arcuate flange 7. 70

Extending from each end of the culvert, are two similar wings 10, 10, these wings 75 extending obliquely outward from the ends as shown in Fig. 4, the bottom edge 11, of these wings extends in a plane forming a tangent to the culvert proper. It is of course understood that these culverts are made of various lengths and capacities. The face of each culvert end at the lower portion is further provided with an outwardly 80 extending lip 12, as shown more clearly in Fig. 3, to insure the water washing into the culvert and preventing the water from seeping under the culvert.

A culvert constructed according to my invention is simple, and inexpensive in construction and both durable and efficient in operation. 85

Having thus described my said invention, what I claim as new and desire to secure by 90 United States Letters Patent is:—

As a new article of manufacture, a tubular culvert traversed from end to end by a cylindrical drain opening, the upper half

of said culvert being of a greater thickness
than the lower half and having two opposite
flat faces each ending in a narrow length-
wise running ledge, the culvert at each up-
5 per end being slightly enlarged and ending
in a skirting flange, two retaining wings
obliquely extending from each end of the
culvert, the bottom edge of said wings be-

ing in a common plane extending tangen-
tially to the bottom part of said culvert. 10

In testimony whereof I affix my signature,
in presence of two witnesses.

ROBERT J. BURNS.

Witnesses:

JOHN J. YELL,
W. L. BURNS.