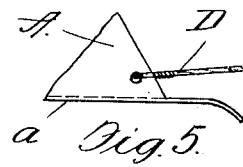
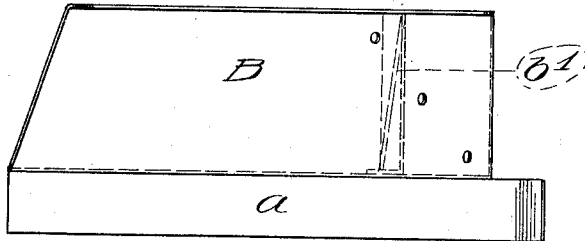
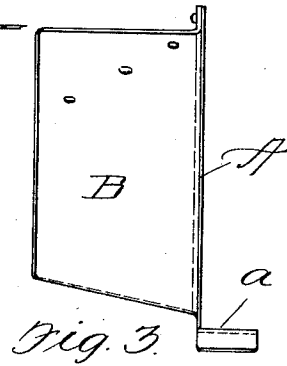
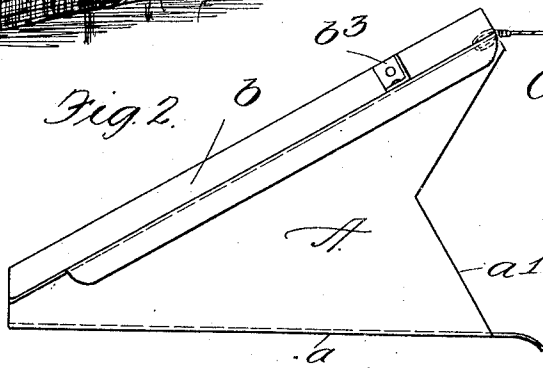
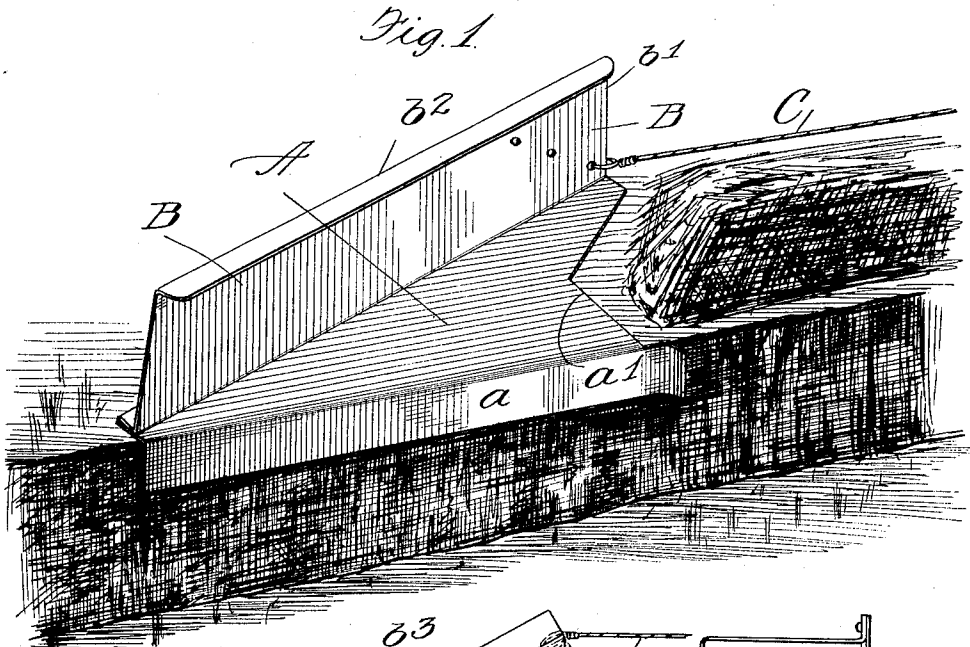


L. MACLACHLAN.  
 DEVICE FOR FILLING IN TRENCHES OR DITCHES.  
 APPLICATION FILED DEC. 2, 1912.

1,112,016.

Patented Sept. 29, 1914.



Witnesses:  
 Mr. Rosen  
 H. Anderson

Fig. 4. Inventor:  
 Lachlan MacLachlan  
 By Arthur F. Diraud  
 Attorney

# UNITED STATES PATENT OFFICE.

LACHLAN MACLACHLAN, OF CHICAGO, ILLINOIS, ASSIGNOR TO FREDERICK C. AUSTIN,  
OF CHICAGO, ILLINOIS.

DEVICE FOR FILLING IN TRENCHES OR DITCHES.

1,112,016.

Specification of Letters Patent.

Patented Sept. 29, 1914.

Application filed December 2, 1912. Serial No. 734,484.

To all whom it may concern:

Be it known that I, LACHLAN MACLACHLAN, a citizen of the United States of America, and resident of Chicago, Cook county, Illinois, have invented a certain new and useful Improvement in Devices for Filling in Trenches or Ditches, of which the following is a specification.

My invention relates to means for returning the excavated dirt to the ditch or trench, after the tile or pipe has been laid therein. Ordinarily, this is done by hand, but such method is slow and expensive. Machines or devices for this purpose, in my judgment, have not been satisfactory.

The object of my invention is, therefore, to provide a novel, effective and easily operated contrivance which can be pulled along the side of the ditch or trench, like a scraper, and which will deflect the dirt into the ditch or trench, being adapted to slide like a shovel below the heaped up dirt, in order to loosen the same, and to then crowd the loose dirt sidewise into the ditch or trench, after the pipe or tile has been laid therein.

To this and other useful ends, my invention consists in matters hereinafter set forth and claimed.

In the accompanying drawings: Figure 1 is a perspective of a dirt shovel embodying the principles of my invention. Fig. 2 is a plan of the same. Fig. 3 is a side elevation thereof. Fig. 4 is a front elevation of the said shovel trimmed on its side for convenience of illustration. Fig. 5 is a fragmentary view showing a modification of my invention.

As thus illustrated, my invention comprises a metal plate A which is substantially triangular in shape, and which has a downturned flange or runner *a* that slides on the face of the bank at the upper edge thereof, whereby lateral displacement of the shovel is prevented. The said plate has a front cutting edge *a*<sup>1</sup> that cuts under the heaped-up dirt at the side of the ditch or trench. The oblique deflector B is secured by a lower flange *b* to the plate A, along the angular rear edge thereof, and has a front cutting edge *b*<sup>1</sup> and an upper flange *b*<sup>2</sup>, being formed from sheet metal or other material. A brace *b*<sup>3</sup> prevents the deflector B from giving way under the pressure of the dirt. A draft connection C runs to the front of the

deflector B, and by this arrangement the dirt shovel thus constructed is pulled along the side of the excavation. The plate A cuts under the dirt, and the deflector B then shoves the dirt sidewise and into the ditch. The runner *a* holds the shovel to its work. If desired, another draft connection, or hitch D, may be secured to the plate A, near the runner *a*, in order to counteract the side draft of the connection C, if any develops. It is obvious, however, that the apparatus for pulling the shovel ahead may be of any suitable, known or approved character. I do not, therefore, limit myself to the exact construction shown and described.

What I claim as my invention is:

1. A back filling shovel comprising a horizontal wall which rests flatwise upon the ground having a cutting edge at its forward end, a depending runner extending along the edge of said wall, adapted to slide along the vertically disposed side of the trench, forming an apron for delivering the dirt from said wall to the trench, and an upstanding deflector mounted on said wall, disposed at an angle with its rear end at the side of the trench, extending continuously along the upper surface of said wall to the front end thereof, the said runner and deflector converging to the rear end of the shovel and said shovel being held by said runner against displacement away from the ditch.
2. A back filling shovel comprising a horizontal wall which rests flatwise upon the ground having a cutting edge at its forward end, a depending runner extending along the edge of said wall, adapted to slide along the vertically disposed side of the trench, forming an apron for delivering the dirt from said wall to the trench, and an upstanding deflector mounted on said wall, disposed at an angle with its rear end at the side of the trench, extending continuously along the upper surface of said wall to the front end thereof, the said runner and deflector converging to the rear end of the shovel and said shovel being held by said runner against displacement away from the ditch, together with a flange along the upper edge of said deflector, overhanging the front surface thereof.
3. A back filling shovel comprising a horizontal wall which rests flatwise upon the

ground having a cutting edge at its forward end, a depending runner extending along the edge of said wall, adapted to slide along the vertically disposed side of the trench, forming an apron for delivering the dirt from said wall to the trench, and an upstanding deflector mounted on said wall, disposed at an angle with its rear end at the side of the trench, extending continuously along the upper surface of said wall to the front end thereof, the said runner and deflector converging to the rear end of the shovel and

said shovel being held by said runner against displacement away from the ditch, together with a draft connection for the forward end of said shovel, and means for adjusting said connection. 15

Signed by me at Chicago, Ill., this 27th day of November 1912.

LACHLAN MACLACHLAN.

Witnesses:

H. KNUDSON,  
G. E. GRANSTROM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."