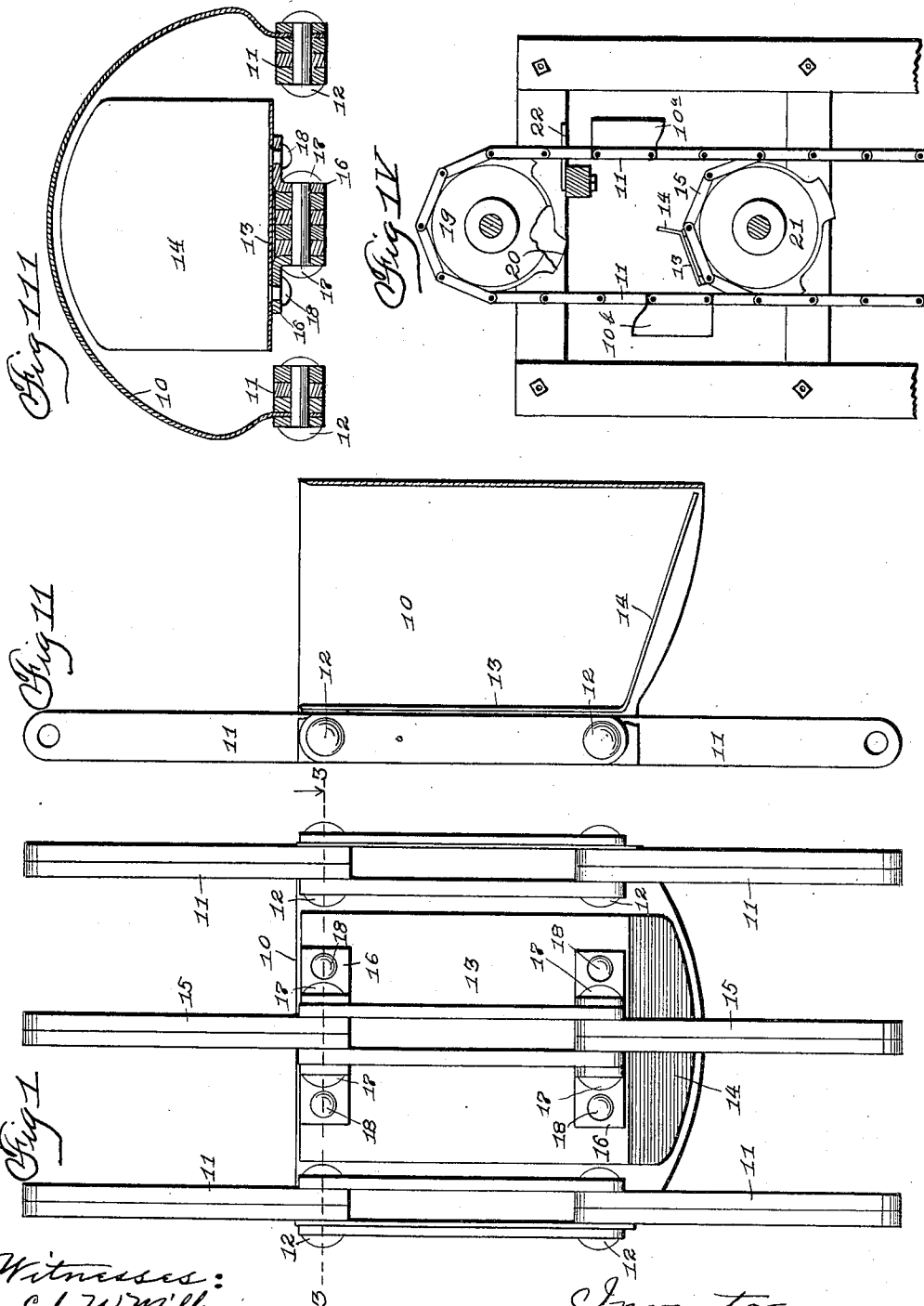


J. P. WALSH.
 BUCKET FOR EXCAVATING MACHINES.
 APPLICATION FILED JAN. 14, 1911.

1,065,286.

Patented June 17, 1913.



Witnesses:
 E. W. Miller
 Blanche Sedgwick

Inventor
 James P. Walsh
 By Jell S. Row, atty

UNITED STATES PATENT OFFICE.

JAMES P. WALSH, OF MARENGO, IOWA.

BUCKET FOR EXCAVATING-MACHINES.

1,065,286.

Specification of Letters Patent.

Patented June 17, 1913.

Application filed January 14, 1911. Serial No. 602,662.

To all whom it may concern:

Be it known that I, JAMES P. WALSH, a citizen of the United States, residing in Marengo, county of Iowa, and State of Iowa, have invented a new and useful Improvement in Buckets for Excavating-Machines, of which the following is a specification.

The object of my invention is to provide a means simple, strong, durable and inexpensive in construction, for thoroughly cleaning the buckets of an endless chain excavating system, each time the buckets travel the circuit. I accomplish this object by constructing my buckets of two distinct parts which are separated from each other, at proper times, in order to permit one portion of the bucket to pass over a scraper during the revolution of the chain.

My invention consists of certain details of construction, hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure I shows a rear elevation view of my device; Fig. II is a side elevation view of the same, partly in section; Fig. III is a sectional view taken on the indicated line 3—3, of Fig. I; and, Fig. IV is a side elevation view of a portion of my improved device in operation.

Referring to the accompanying drawings the reference numeral 10 is used to indicate the outer wall of my bucket, preferably semi-circular in conformation and constructed of sheet metal, said wall being open at both ends and formed with a cutting edge on one end, as shown.

The numerals 11 indicate two companion chains, exactly similar in every respect, formed with alternating open and closed links and the wall 10 is mounted, transversely, between these two chains, by means of rivets 12. A rear wall 13, formed with a flange 14 designed as a bottom for my bucket, is secured to a chain 15, located midway between the chains 11, said chain 15 being also constructed with alternating open and closed links. The rear wall 13 is constructed, preferably, of sheet metal and the same is secured, by means of lugs 16 and rivets 17 and 18, flush with the chain 15, and parallel thereto, and the flange portion 14 extends outwardly, on a slight incline, across the open space between the chains 11 and the outwardly curving wall 10, thus forming a bottom for my bucket, when the

parts are operating together. The three chains, indicated by the numerals 11 and 15, are formed of exactly similar links, but the chain 15 is shorter than the chains 11, for purposes hereinafter set forth.

The numerals 19 and 20 indicate sprocket wheels, mounted, at the upper extremity of the supporting frame for my device, on a common shaft, said sprocket wheels being designed to operate their respective chains 11. Mounted in the said supporting frame, by means of a shaft, and below the sprocket wheels 19 and 20, is a sprocket wheel 21 designed to drive the chain 15. All the aforesaid sprocket wheels are of like size and driven by the same power and, obviously, their revolutions are exactly similar.

It is obvious that the chain 15, passing over the sprocket wheel 21, will withdraw the portion forming the rear wall 13, from the outer covering 10, on account of the mounting of the said sprocket wheels, and the distance between the sprocket wheels 19 and 20 and the sprocket wheel 21 is such that the portion constituting the rear wall 13 and the bottom 14, will be withdrawn from the outer covering 10^a, as the chains move upwardly, and will pass over its sprocket wheel 21 and enter the preceding outer covering 10^b, on the chains 11, as the chains descend, after passing over their sprocket wheels 19 and 20. This leaves the bucket 10^a without back or bottom and allowing a scraper 22, mounted in the frame work above the sprocket wheel 21, to traverse the full length of the interior of the outer covering 10^a, as it travels up past said scraper, thereby removing all wet and sticky earth. The balance of the distance the chains 11 and the chain 15 run together with the coverings 10 and the back walls 13 in their proper positions, with relation to each other, as shown in Fig. I.

Having thus described my invention what I claim and desire to secure by Letters Patent of the United States is:

1. In combination with a pair of spaced endless sprocket chains, a bucket having the free ends of the sides of its outer wall secured to said chains, a third endless chain located in the space between said pair of chains, a rear wall for the bucket having a flange at one end which forms the bucket bottom, an upper and a lower pair of right angular lugs rigidly secured at one end to the center of said rear wall and having their

opposite ends extending on and secured to the opposite sides of said third chain, the upper end of the third chain being located below the upper ends of the said pair of chains, and a horizontal scraper located between the upper ends of said chains and the upper end of said third chain to engage on the interior of the bucket.

2. In combination with a pair of spaced endless sprocket chains, a bucket having the free ends of the sides of its outer wall secured to said chains, a third endless chain located in the space between said pair of chains, a rear wall for the bucket having a

flange at one end which forms the bucket bottom, means to secure said rear wall to the third chain, the upper end of the third chain extending below the upper ends of the pair of chains, and a scraper arranged in the space between the upper end of the third chain and the upper ends of the pair of chains to engage on the interior of the bucket.

JAMES P. WALSH.

Witnesses:

JOHN L. WALSH,
WILLIAM C. WALSH.

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