

(No Model.)

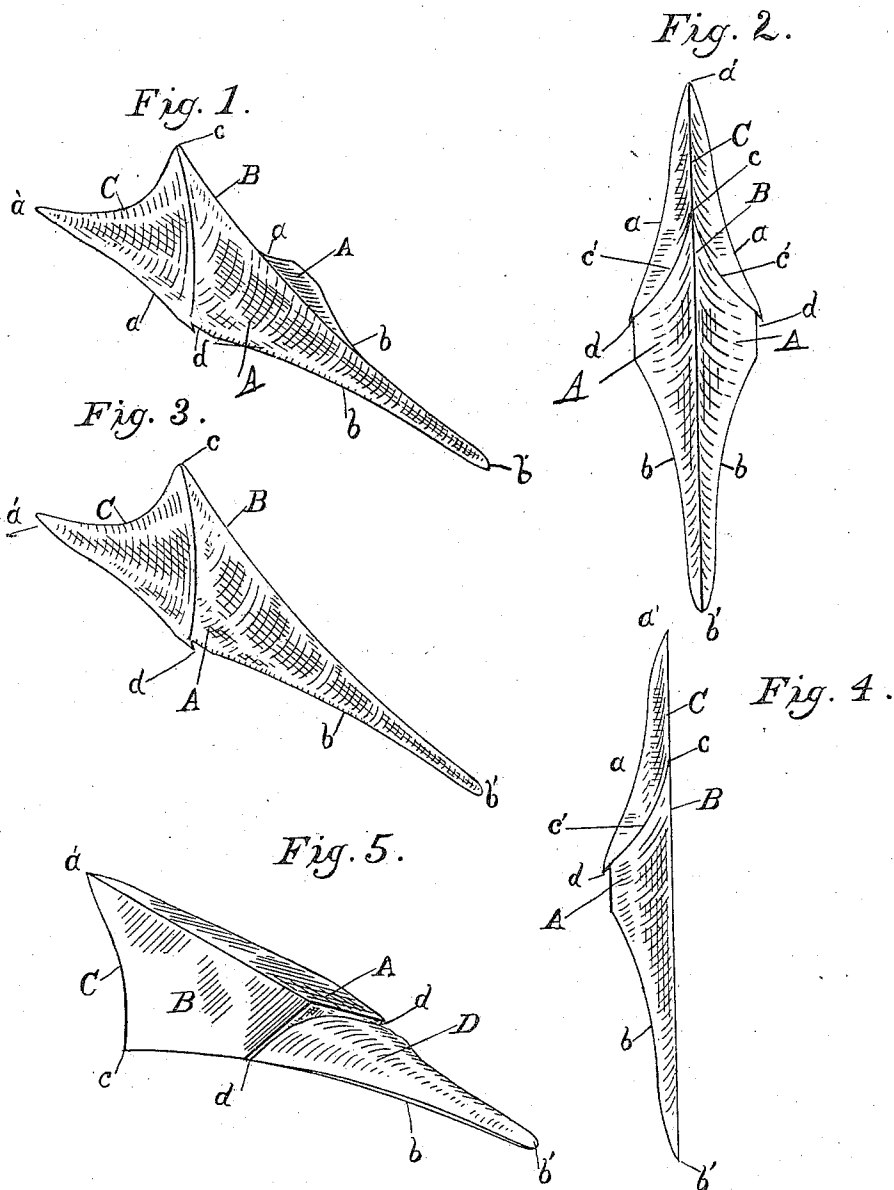
2 Sheets—Sheet 1.

E. C. MANNING.

TOOTH FOR EXCAVATOR BUCKETS.

No. 309,553.

Patented Dec. 23, 1884.



WITNESSES

C. H. Sheen.

Jos. L. Talbey

INVENTOR

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2 Sheets—Sheet 2.

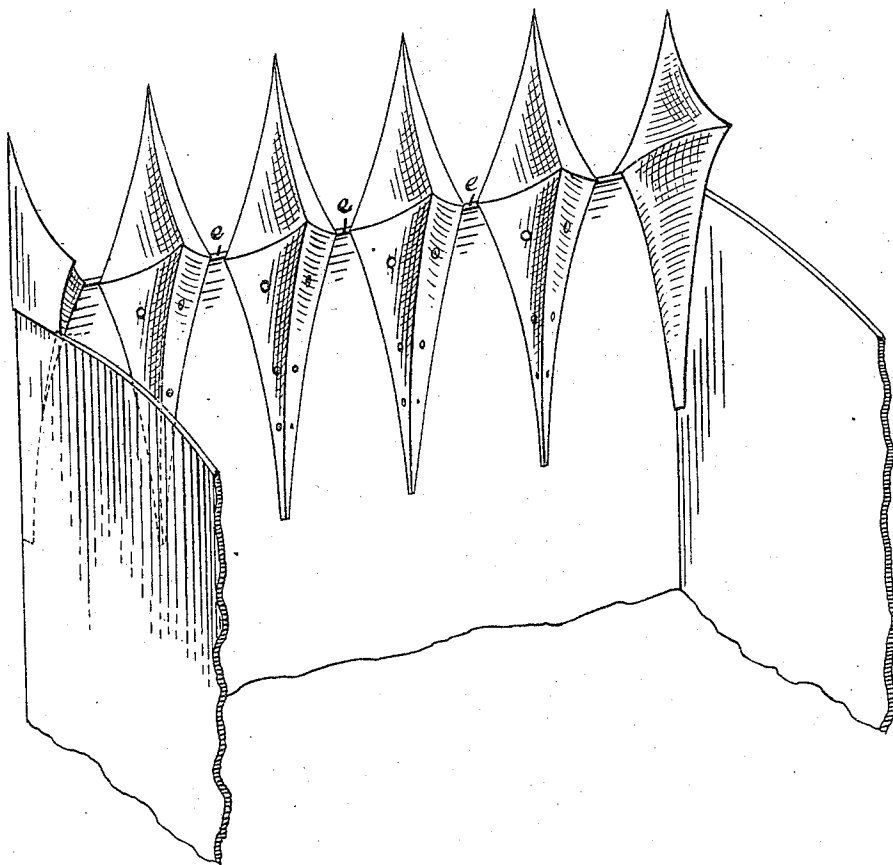
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*Fig. 6.*



WITNESSES

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# UNITED STATES PATENT OFFICE.

EDWIN C. MANNING, OF WASHINGTON, DISTRICT OF COLUMBIA.

## TOOTH FOR EXCAVATOR-BUCKETS.

SPECIFICATION forming part of Letters Patent No. 309,553, dated December 23, 1884.

Application filed April 26, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN C. MANNING, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Teeth for Excavator-Buckets, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention has relation to the construction of the teeth of excavator-buckets, and the object of the invention is to so form the teeth, which are secured to the rim of the bucket, that they will enable the bucket to fill rapidly and with the greatest facility; and to these ends the novelty consists in the construction of the tooth, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings, the same letters of reference indicate the same parts of the invention.

Figure 1 is a perspective view of one of the intermediate or middle teeth. Fig. 2 is a front elevation of the same. Fig. 3 is a perspective view of one of the end teeth. Fig. 4 is a front elevation of the same. Fig. 5 is a rear perspective of one of the end teeth, and Fig. 6 is a perspective view of the front portion of a bucket with the teeth in position.

A is the breast of the tooth, and its forward sides, *a a*, curve inwardly and meet at the cutting-point *a'*, while the rear sides, *b b*, extend backward in a similar manner to the end *b'*. B is a central knife-edge, extending centrally upward and forward from each side of the breast A, forming a curve from the point *c* to the end *b'*, and C is a similar though shorter central knife-edge, extending from the point *c* forward to the point *a'*. This knife-edge C gradually increases in thickness from the cutting-point *a'* to the point *c'*, and from this

point the rear cutting-knife edge, B, gradually diminishes until the rear end, *b'*, of the tooth is reached. This construction enables the tooth to separate a portion from a mass, so as to fill the bucket very rapidly and with the greatest facility, as it is impossible to clog it or in any manner interfere with its regular and uniform operation.

The corner teeth (shown in Figs. 3, 4, and 5) are similar in construction, being in fact one-half of the same taken on a line from the point *a'* to the end *b'*, except that its rear portion is rounded at D, to correspond to the rounded corner of the excavator-bucket. One of these corner teeth is placed in each corner of the bucket, and the space between them filled up with the intermediate teeth, (shown in Figs. 1 and 2,) the beveled edge *d* resting upon the rim *e* of the bucket, and the teeth secured thereto by bolts, rivets, or screws in any suitable manner.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

1. A tooth for excavator-buckets, consisting of the breast A, having cutting-edges C *a a*, converging at the point *a'*, and provided with the beveled bearing edge *d*, as and for the purpose set forth.

2. A tooth for excavator-buckets, consisting of the breast A, having the central projection, B, provided with a forwardly-curved cutting-knife edge, C, as and for the purpose set forth.

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

EDWIN C. MANNING.

Witnesses:

E. H. BRADFORD,  
H. J. ENNIS.