

J. B. WOOD.
Dredging-Buckets.

No. 153,795.

Patented Aug. 4, 1874.

Fig: 1.

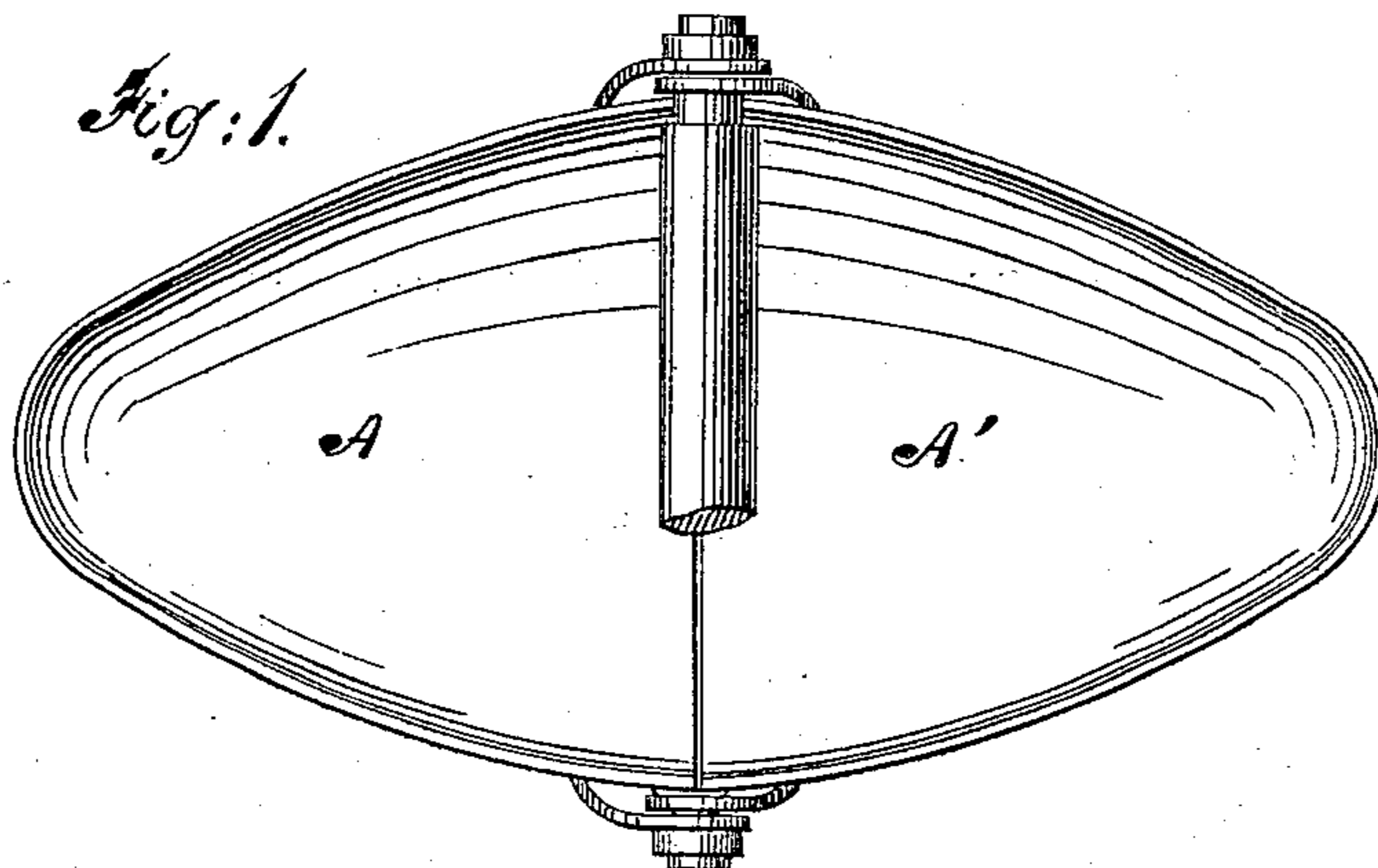


Fig: 2.

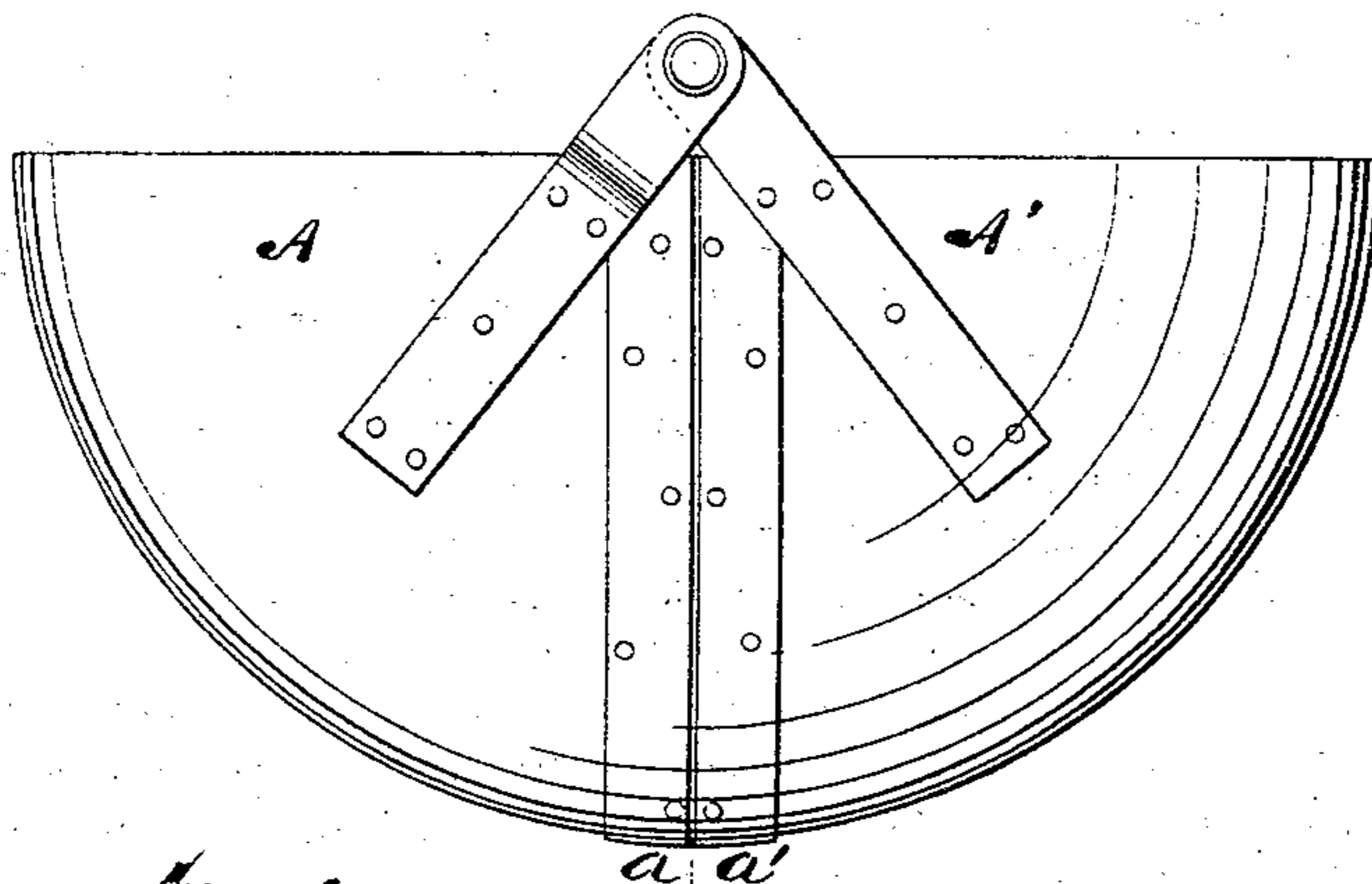
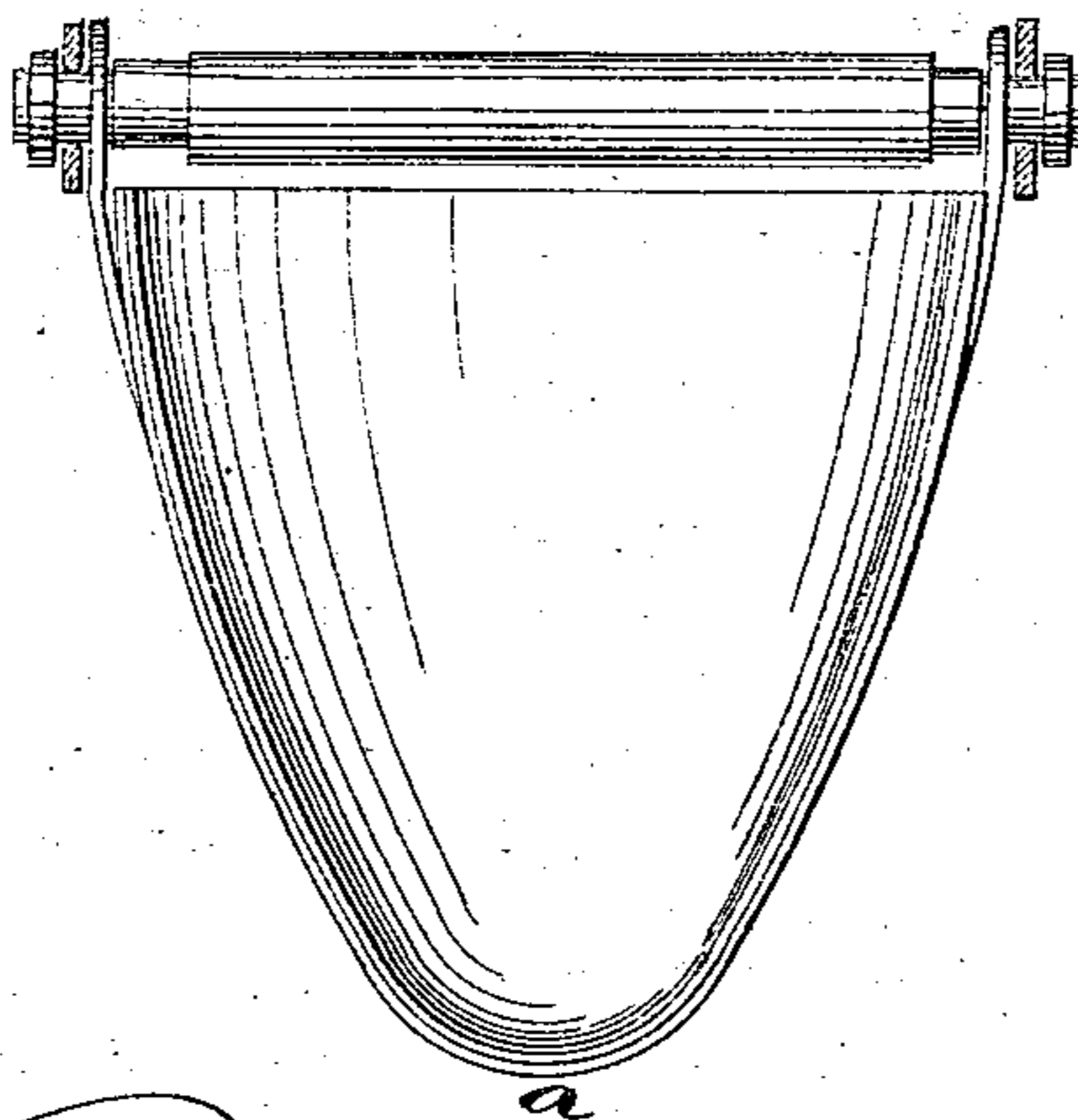


Fig: 3.



Witnesses:

Chas. Nida
H. B. Mattenberg

Inventor:

John B. Wood
per J. M. Simpson
Atty

UNITED STATES PATENT OFFICE.

JOHN B. WOOD, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN DREDGING-BUCKETS.

Specification forming part of Letters Patent No. **153,795**, dated August 4, 1874; application filed June 16, 1874.

To all whom it may concern:

Be it known that I, JOHN B. WOOD, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Dredging-Bucket; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention is in the nature of an improvement in dredging-buckets; and the invention consists in a dredging-bucket constructed of two sections, of a semi-ellipsoidal or semi-conoidal form, hinged, secured, and operated as dredging-buckets are ordinarily hinged, secured, and operated.

By constructing a dredging-bucket of two sections, of a semi-ellipsoidal or semi-conoidal form, the under surface of the bucket is brought to a rounded and reduced edge, so that when excavating hard surfaces or substances, such as clay, the edges of the bucket, when brought together on the material to be excavated, present but a small surface to be opposed to the clay, and consequently are forced with much greater facility into the clay, and the operation of filling the bucket is very greatly expedited; besides, the bucket flaring outward, or enlarging from its lower edge, no resistance is offered to the free admission of the clay within the sections of the bucket.

Another advantage in constructing a bucket in the shape of a semi-ellipsoid is, that when dredging out dumping-scows, which had previously been filled for the purpose of transporting the excavated material away, the semi-ellipsoidal shape of the bucket will permit it to dredge out the scow freely to its bottom and close to its sides. This feature is of much importance, when it is considered that the inner sides of the scow slope inward at a considerable angle, so that the ordinary dredging-bucket, with its broad sections, cannot dredge out these boats in so thorough a manner as can a bucket of a semi-ellipsoidal or semi-conoidal form.

In the accompanying sheet of drawings, Figure 1 represents a plan view of my im-

proved bucket; Fig. 2, a side view of same; Fig. 3, an end view of same.

Similar letters of reference indicate like parts in the several figures.

A A' represent two sections of a bucket for dredging purposes. These sections are sections of a semi-ellipsoid or semi-conoid, and are hinged, secured, and operated in precisely the same way as are other dredging-buckets, known as "clam-shell" buckets. When the bucket is operated for excavating, it is opened, and in its opened state it is brought in contact with the surface of the material to be excavated, the edges *a a'* resting on the surface, so that as the two sections are brought together, as they may be by any of the well-known means, these edges readily enter into the surface of the clay or otherwise, cutting out the material with great facility. As the material is cut out, the bucket is readily filled, its wedge-like shape permitting it to sink into the clay or otherwise, and its sides, flaring outward and upward from its lower edge, permit the clay, &c., to enter the bucket with great freedom, since little or no friction would be opposed to it.

A dredging-bucket constructed as above described cannot only be operated with greater facility than the ordinary bucket, but it will, in some instances, dredge out material that the ordinary bucket will not, unless provided with special contrivances for that purpose.

It is immaterial how my bucket is operated, since any of the well-known devices for operating the clam-shell dredging-buckets may be used for this purpose; and since these means of operating buckets are old and well known they need no special reference in this application.

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

A dredging-bucket constructed of sections of semi-ellipsoidal or semi-conoidal form, substantially in the manner shown, and for the purpose described.

JOHN B. WOOD.

Witnesses:

H. L. WATTENBERG,
W. ANDERSON.