

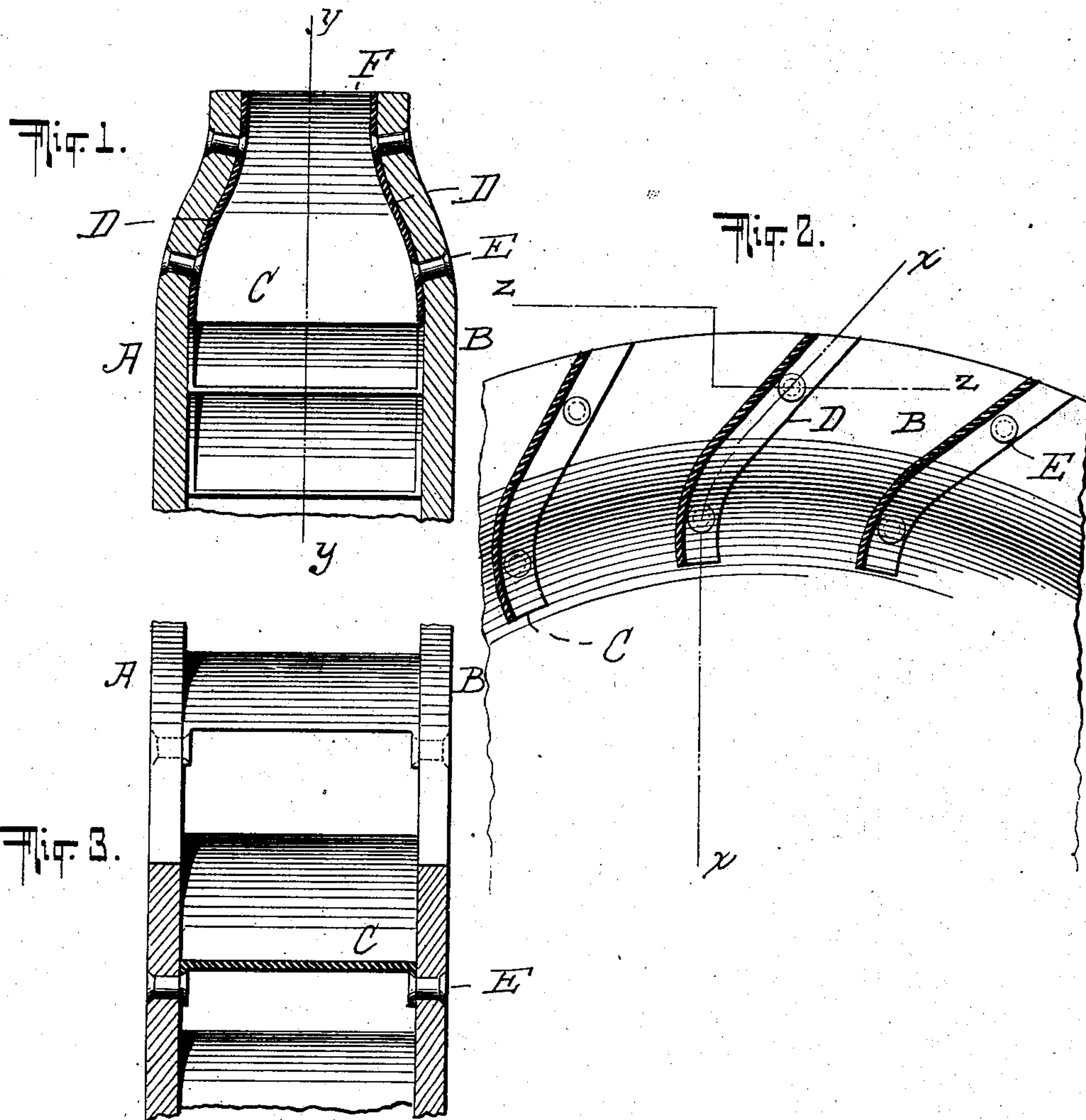
No. 751,315.

PATENTED FEB. 2, 1904.

T. G. E. LINDMARK.
TURBINE WHEEL.

APPLICATION FILED JUNE 2, 1903.

NO MODEL.



WITNESSES:

Gustave Dietrich

Edwin H. Dietrich

INVENTOR

Tore G. E. Lindmark

BY

Rank Benjamin

ATTORNEY

UNITED STATES PATENT OFFICE.

TORE GUSTAF EMANUEL LINDMARK, OF STOCKHOLM, SWEDEN.

TURBINE-WHEEL.

SPECIFICATION forming part of Letters Patent No. 751,315, dated February 2, 1904.

Application filed June 2, 1903. Serial No. 159,723. (No model.)

To all whom it may concern:

Be it known that I, TORE GUSTAF EMANUEL LINDMARK, a subject of the King of Sweden and Norway, and a resident of Stockholm, Sweden, have invented a new and useful Improvement in Turbine-Wheels, of which the following is a specification.

The invention relates to elastic-fluid turbine-wheels; and it consists in the construction and arrangement of the buckets in a wheel of the outward-flow type.

In the accompanying drawings, Figure 1 is a section of the outer portion of a wheel on the line *xx* of Fig. 2. Fig. 2 is a section on the line *yy* of Fig. 1, and Fig. 3 is a section on the line *zz* of Fig. 2.

Similar letters of reference indicate like parts.

The wheel to which the bucket is applied is formed of two heads A B, between which the steam enters at the center and escapes at the periphery in the usual way. At the circumference of the wheel the heads are inwardly bent to produce a contracted escape-passage F. The buckets C are shaped to fit transversely this contracted portion and are inclined substantially as shown. Each bucket

is provided with side flanges D, which when the buckets are in place rest against the inner faces of the heads and are secured thereto by rivets E.

I claim—

1. In combination with a turbine-wheel having heads A B inwardly inclined at their circumferential edge to form a contracted escape-opening, a bucket adapted to fit transversely said opening and provided with flanges D at its side edges; the said flanges being secured to said heads.

2. In combination with an outward-flow turbine-wheel having heads A B inwardly inclined at their circumferential edges to form a contracted escape-opening, a plurality of buckets all bent in the same direction and adapted to fit transversely said opening and provided with flanges D at their side edges; the said flanges being secured to said heads.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

TORE GUSTAF EMANUEL LINDMARK.

Witnesses:

HERM. FORSSBERG,
K. GUST. ALMÉUF.