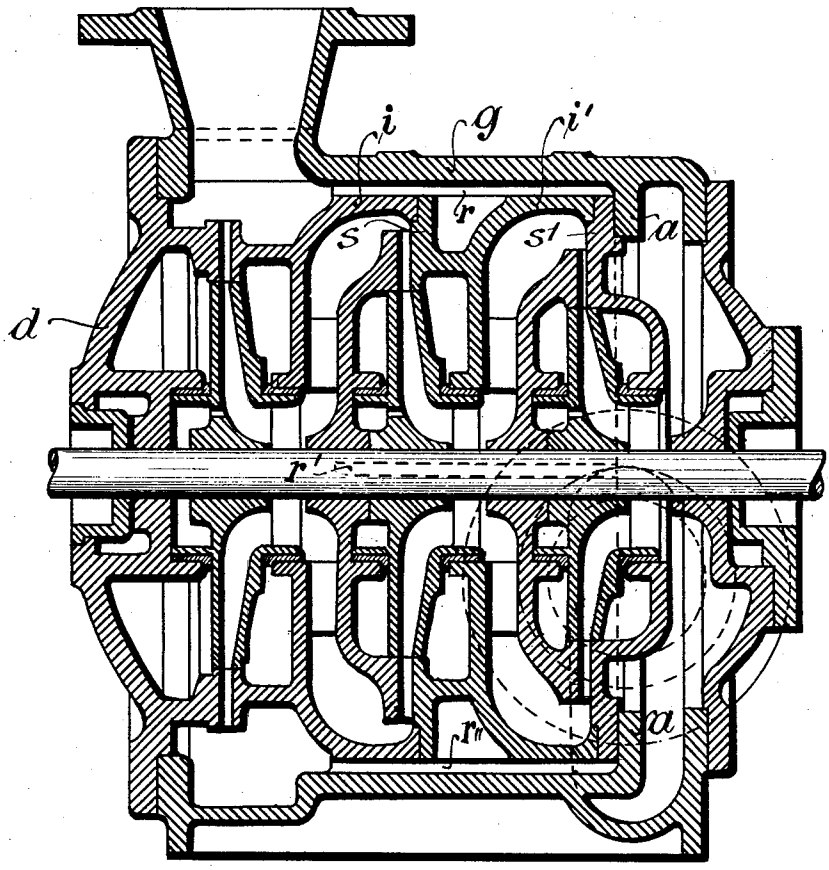
No. 863,706. PATENTED AUG. 20, 1907.

C. ENKE.

ROTARY PUMP.

APPLICATION FILED NOV. 1, 1906.



Witnesses:
S. Ford
P. Haddan

Inventor:
Carl Enke
per H. H. Haddan
Attorney

UNITED STATES PATENT OFFICE.

CARL ENKE, OF SCHKEUDITZ, GERMANY.

ROTARY PUMP.

No. 863,706. Specification of Letters Patent. Patented Aug. 20, 1907.

Application filed November 1, 1906. Serial No. 341,626.

To all whom it may concern:

Be it known that I, CARL ENKE, a subject of the German Emperor, residing at Schkeuditz, in Saxony, Germany, have invented certain new and useful Improvements in Rotary Pumps, of which the following is a specification.

The present invention relates to a multiple step rotary pump characterized by the fact that the stationary elements fitting closely against each other by means of risers or projections are carried within a casing by a plurality of internal longitudinal ribs so that the elements contact with the pump casing only along the summits of said ribs.

The object of the invention is to enable the elements to be easily withdrawn from and inserted in the pump casing and to prevent them rusting in.

The invention is represented in the accompanying drawing which is a vertical section of the improved pump.

In said drawing *g* indicates the pump casing *d* an end casing cover and *i*, *i'* the stationary rings or elements provided with extensions or risers *s*, *s'* for making a close fit between them.

The longitudinal ribs *r*, *r'* and *r''* may be arranged on the internal wall of the casing or on the surfaces of the rings *i*, *i'*, of each element so that either the said ring-surfaces rest on the ribs integral with the pump casing or the ribs integral with the rings contact with the wall of the pump casing, which remains smooth.

The arrangement of facings described has the great advantage that the entire surfaces of the rings *i*, *i'*, do not come into contact with the wall of the pump casing and thus do not adhere to the latter owing to rust or dirt.

By means of the cover *d* the elements are held together and forced against a flange *a* on the wall of the casing and at the same time the water under pressure forces the parts together and thus automatically effects a closer fitting of the elements.

What I claim as my invention and desire to secure by Letters Patent of the United States is:—

A multiple step rotary pump comprising a casing, a series of annular elements closely fitting together and mounted therein and longitudinal ribs between said elements and casing for preventing contact of adjacent surfaces of said elements and the pump casing except at a small number of points for the purpose set forth.

In witness whereof I have signed this specification in the presence of two witnesses.

CARL ENKE.

Witnesses:
HERM. LARK,
RUDOLPH FRICKE.