H. O. LINDGREN.

SUPPORTING STRIP FOR CONICAL LINER PLATES IN THE BOWL OF CENTRIFUGAL SEPARATORS.

APPLICATION FILED MAY 24, 1922.

1,427,486

Patented Aug. 29, 1922.
To all whom it may concern:

Be it known that I, Hans Olof Lindgren, engineer, subject of the King of Sweden, residing at 8 Fleminggatan, Stockholm, Sweden, have invented certain new and useful Improvements in Supporting Strips for Conical Liner Plates in the Bowl of Centrifugal Separators, of which the following is a specification.

In large bowls of centrifugal separators having conical liner plates it will not be sufficient to guide the latter at the center, it being necessary to support the same also at the outer periphery. Since solid particles almost without exception are separated from the treated liquid and by the influence of the centrifugal force are forced towards the wall of the bowl, a space between the outer periphery of the liner and the wall of the bowl has to be provided for the said solid particles, on account whereof the liner cannot bear immediately against the wall of the bowl. To this purpose strips projecting from said wall are provided. Since the annular space at the periphery of the bowl unoccupied by the liner—the mud chamber—is divided by said strips into a number of partitions separated from one another, the use of such strips has hitherto been connected with certain inconveniences described below. It being impossible to supply the liquid to the liner in such a manner that the solid particles are collected uniformly in the mud chamber along the periphery of the liner plates, the quantity of mud accumulated in different partitions may vary considerably. This will cause an increased want of power, increased wear of the guide faces and overheating of the bearings.

This invention the object of which is to reduce the cause of said inconveniences, that is to say the irregular deposit of the mud consists in that the strips are provided with one or more grooves preferably extending from the surface bearing against the wall of the bowl.

One embodiment of the invention is illustrated in the accompanying drawing. A designates the wall of the bowl, B the liner and C the supporting strips provided with grooves D. With reference to the strength the supporting strips are provided with supporting projections E, which, however, in case of strips of less length may be omitted.

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

1. Bowls of centrifugal separators having conical liner plates and supporting strips provided at the wall of the bowl, characterized by the strips being provided with grooves adapted to allow equalizing of the deposit of mud in the annular space between the liner and the wall of the bowl.

2. An embodiment of the arrangement set forth in claim 1, characterized by the grooves extending to the wall of the bowl, the strips being divided into supporting projections.

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

HANS OLOF LINDGREN.

Witnesses:
H. Hellberg, Erio Hooger.