

No. 671,780.

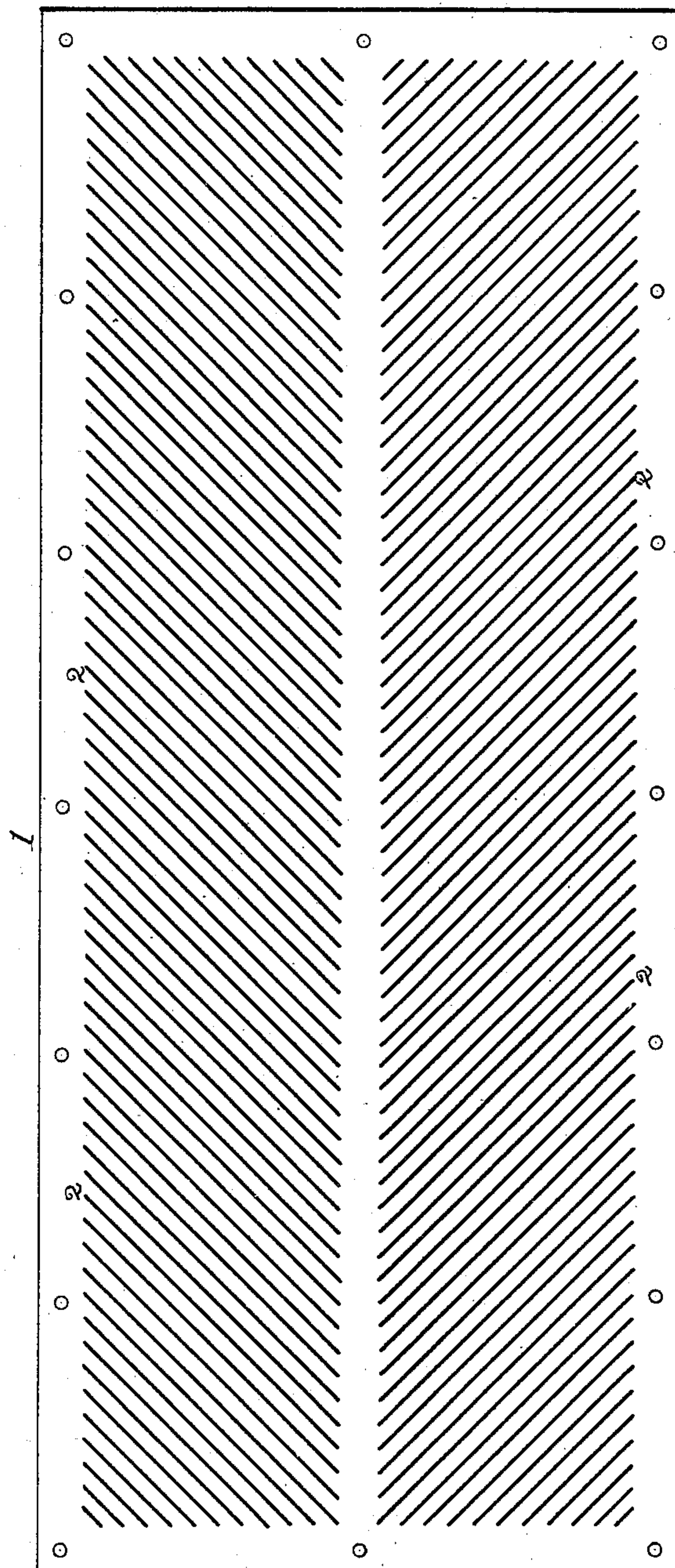
Patented Apr. 9, 1901.

R. SMITH.

SCREEN PLATE FOR PAPER MAKING MACHINES.

(Application filed June 30, 1898.)

(No Model.)



Witnesses.

O. P. Sanderson,
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Inventor.

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By *Frederick Curtis, Attorney.*

UNITED STATES PATENT OFFICE.

RICHARD SMITH, OF SHERBROOK, CANADA.

SCREEN-PLATE FOR PAPER-MAKING MACHINES.

SPECIFICATION forming part of Letters Patent No. 671,780, dated April 9, 1901.

Application filed June 30, 1898. Serial No. 684,904. (No model.)

To all whom it may concern:

Be it known that I, RICHARD SMITH, residing at Sherbrook, in the county of Sherbrook, Province of Quebec, Canada, have invented
5 a new and useful Screen-Plate for Paper-Making Machines, of which the following is a specification.

This invention consists in the peculiar disposition of the screening-slots of the screen-plate of a paper-making machine, by means
10 of which greater efficiency in the screening of the pulp is secured and the clogging of the plate is prevented to a much greater degree than heretofore and by means of which the
15 screen-plate may be more thoroughly and expeditiously cleaned. Heretofore, so far as my knowledge extends, the slots in such screen-plates have been arranged in lines parallel to the boundaries of the plate either longitudinally or transversely thereof. In my
20 present invention I dispose the slots of the screen-plate obliquely to the boundaries or body of the plate, as shown in the accompanying drawing.

25 I have ascertained by practical experiments that when the slots are arranged obliquely, as stated, the fibers of the pulp are less liable to cling to the edges of such slots and much of the clogging of a screen-plate experienced
30 from this cause is avoided.

By the employment of the obliquely-disposed slots the cleaning of the screen-plate can be more thoroughly done, for the reason that such of the fibers as adhere to the edges
35 of the slots are gradually crowded through,

whereas with the parallel slots they would remain.

In the accompanying drawing, which is a plan of a screen-plate, such plate is shown at 1 and its slots at 2 2 2, &c., such slots, as before stated, being disposed in lines obliquely to the boundaries or general body of the plate. In the present instance these slots are arranged in two rows at opposing angles, each occupying one-half of the plate, which I have
40 found to be a very effective arrangement; but they may be in one row, extending entirely across the plate, or in three or more rows.

I do not confine myself to any arbitrary grouping of the slots so long as they are disposed obliquely to the boundaries or body of the plate, as it is in this feature that I consider my present invention to consist.

What I claim is—

1. A screen-plate for paper-making machines provided with oblique open parallel slots for the purpose set forth. 55

2. A screen-plate for paper-making machines provided with two parallel series of oblique slots, the slots of each series being
60 parallel to each other and reversely inclined with respect to the slots of the other series, substantially as set forth.

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

RICHARD SMITH.

Witnesses:

F. CURTIS,
O. H. THORNTON.