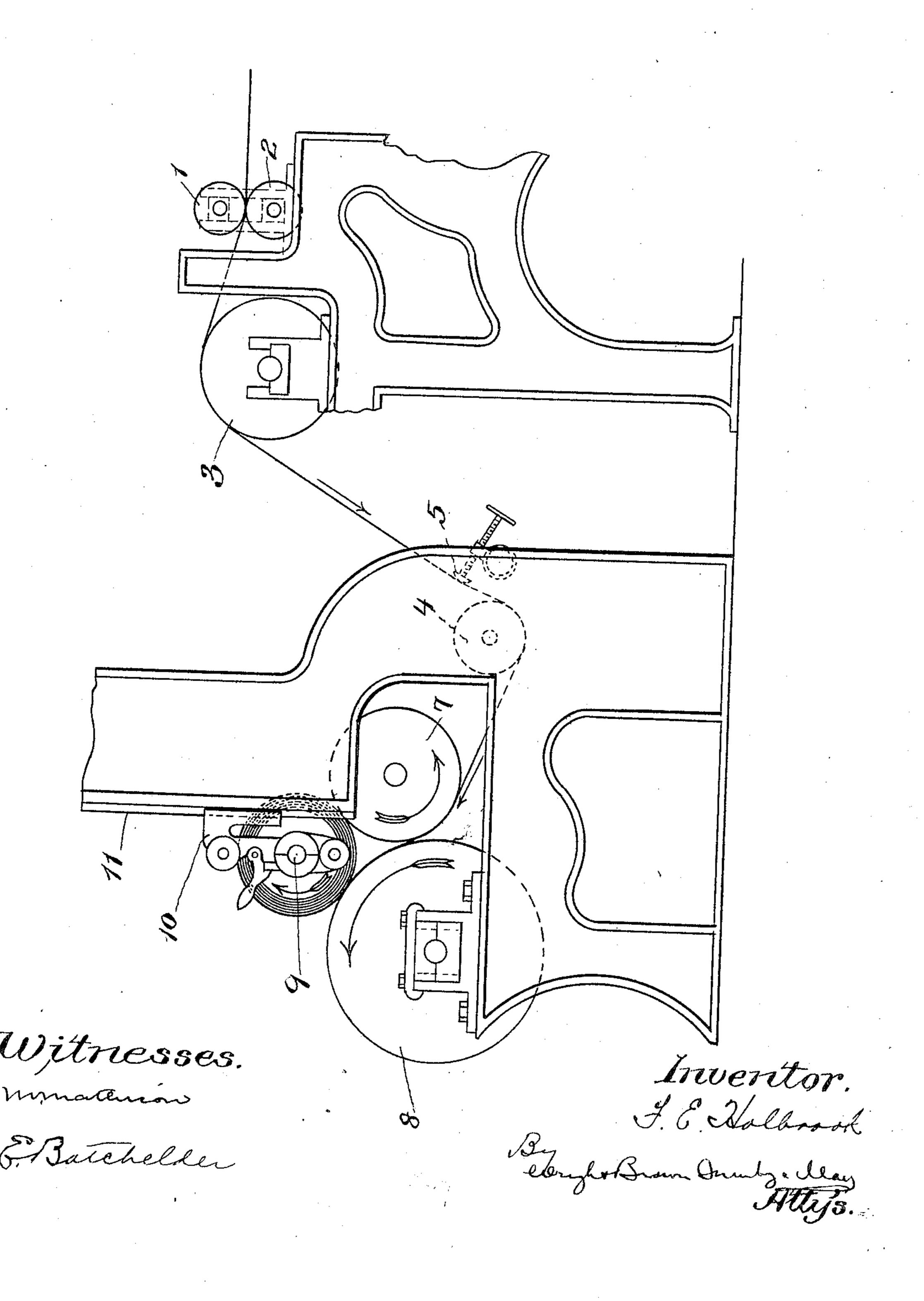
F. E. HOLBROOK.

PAPER WINDING MACHINE.

APPLICATION FILED MAR. 26, 1906.



INITED STATES PATENT OFFICE.

FRANK E. HOLBROOK, OF MILLINOCKET, MAINE, ASSIGNOR TO GREAT NORTHERN PAPER COMPANY, OF MILLINOCKET, MAINE.

PAPER-WINDING MACHINE.

No. 828,653.

Specification of Letters Patent.

Patented Aug. 14, 1906.

Application filed March 26, 1906. Serial No. 308,013.

To all whom it may concern:

Be it known that I, Frank E. Holbrook, of Millinocket, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Paper-Winding Machines, of which the following is a specification.

This invention relates to a new and improved machine for winding webs of paper or other material; and it consists in the provision of means for effecting the tight and even

winding of the roll.

The drawing in side elevation shows the winding end of a paper-machine, the other parts of the machine being omitted, as they

form no part of my invention.

The slitter-rolls 1 2, the stationary drum 3, the rotating idler-roll 4, and the adjustable spring-board 5 may be of the usual or any

7 8 represent, respectively, a small and large winder-drum mounted to rotate in the same direction and arranged to support and rotate the roll of paper carried by the winding-shaft 9, that is carried by brackets 10, arranged to slide on vertical ways 11, as is usual.

The parts as described are common in paper-machines, with the exception of the direction in which the drum 7 rotates. Heretofore the periphery of drums corresponding to the drum 7 has been rotated in the direction of the travel of the web.

In my improved machine the periphery of the drum 7 rotates in a direction opposite to that of the travel of the web and by its engagement with said web acts as a drag on the sheet and secures the tight and even winding of the web on the roll.

Having thus explained the nature of my 40 invention and described a way of constructing and using the same, though without attempting to set forth all of the forms in which it may be made or all of the modes of its use, what I claim, and desire to secure by Letters 45

In a paper-winding machine, a winding-drum upon which the roll of paper is adapted to rest and arranged to engage the web before and at the point where the unwound web enters upon the roll, a retarding-drum arranged upon the opposite side of the web from the winding-drum, the periphery of the retarding-drum engaging the web in advance of the winding-drum and engaging the roll at a point beyond the point where the unwound web engages the roll, and means for rotating said drums in the same direction.

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

FRANK E. HOLBROOK.

Witnesses:
GEO. W. STEARNS,
FRED. M. GATES.