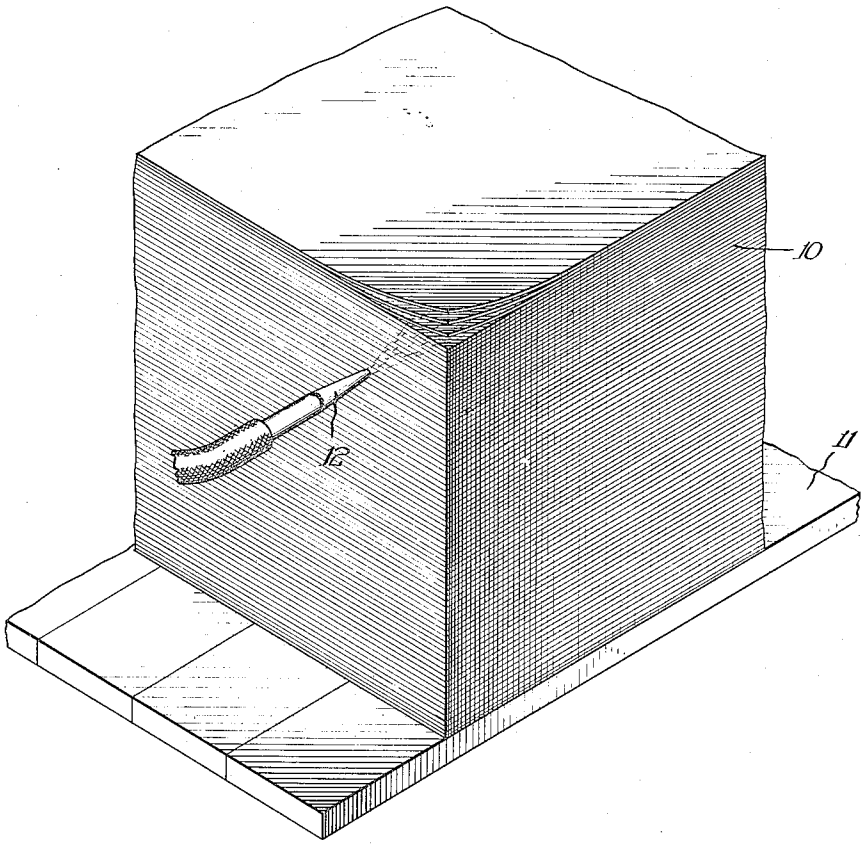
June 24, 1924. 1,498,966

C. HENDERSON

METHOD OF AND MEANS FOR SWELLING A PILE

Filed Feb. 1, 1922



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Patented June 24, 1924. 1,498,966

UNITED STATES PATENT OFFICE.

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METHOD OF AND MEANS FOR SWELLING A PILE.

Application filed February 1, 1922. Serial No. 533,186.

To all whom it may concern:

Be it known that I, CARL HENDERSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Method of and Means for Swelling a Pile, of which the following is a specification.

This invention relates to a method of and means for swelling a pile of sheet material for facilitating the separation of the sheets therein.

As is well known, sheet material which is fed to the impression means of a printing press is taken from a pile. The separation of the sheets one at a time from the pile is one of the difficult problems encountered in the operation of printing presses. Various devices have been provided for facilitating the separation of sheet material, most of these devices being designed to take only one sheet at a time from the pile and others for causing the separation of the second sheet from the first sheet if more than one sheet is taken from the pile at any one time, but regardless of what device is being used, it is advantageous to condition the pile so that separation of one sheet from another will be facilitated.

One object of my present invention is to condition a pile of sheet material in a simple and efficient manner whereby such separation of the sheets will be greatly facilitated.

This and other objects are accomplished by means of the arrangement disclosed on the accompanying sheet of drawings, in which the single figure is a perspective view of a pile of sheet material and means whereby separation of the sheets may be facilitated.

The pile 10 of sheets is supported on any suitable member 11 which may be a paper feeding attachment for a printing press or the like. It is easier to cause a separation of sheet material at the corner of the pile than at any other point. Accordingly, the jet 12 shown is pointed at the corner of the pile whereby the medium issuing from the jet will be directed to the desired spot.

To facilitate the separation of the sheets I have discovered that by swelling the pile the top group of sheets separate one from the other in a manner to meet the requirements for successful commercial operation. For swelling the pile a blast of hot air or preferably a blast of steam, is found most efficient. By shooting a blast of steam directly into the corner of the pile the latter swells up, causing an initial separation of the sheets whereby when a suction device is employed for removing the top sheet from the pile efficient separation with less tendency of effecting a second sheet is made possible.

It is my intention to cover all modifications of the invention falling within the spirit and scope of the following claim.

I claim:

A method of swelling a pile of sheet material to facilitate separation of the sheets in the pile consisting in directing a blast of steam against an edge of said pile, thereby causing an expansion of the sheet material for assisting in swelling the pile.

Signed at Chicago, Illinois, this 28th day of December, 1921.

CARL HENDERSON.