

No. 865,057.

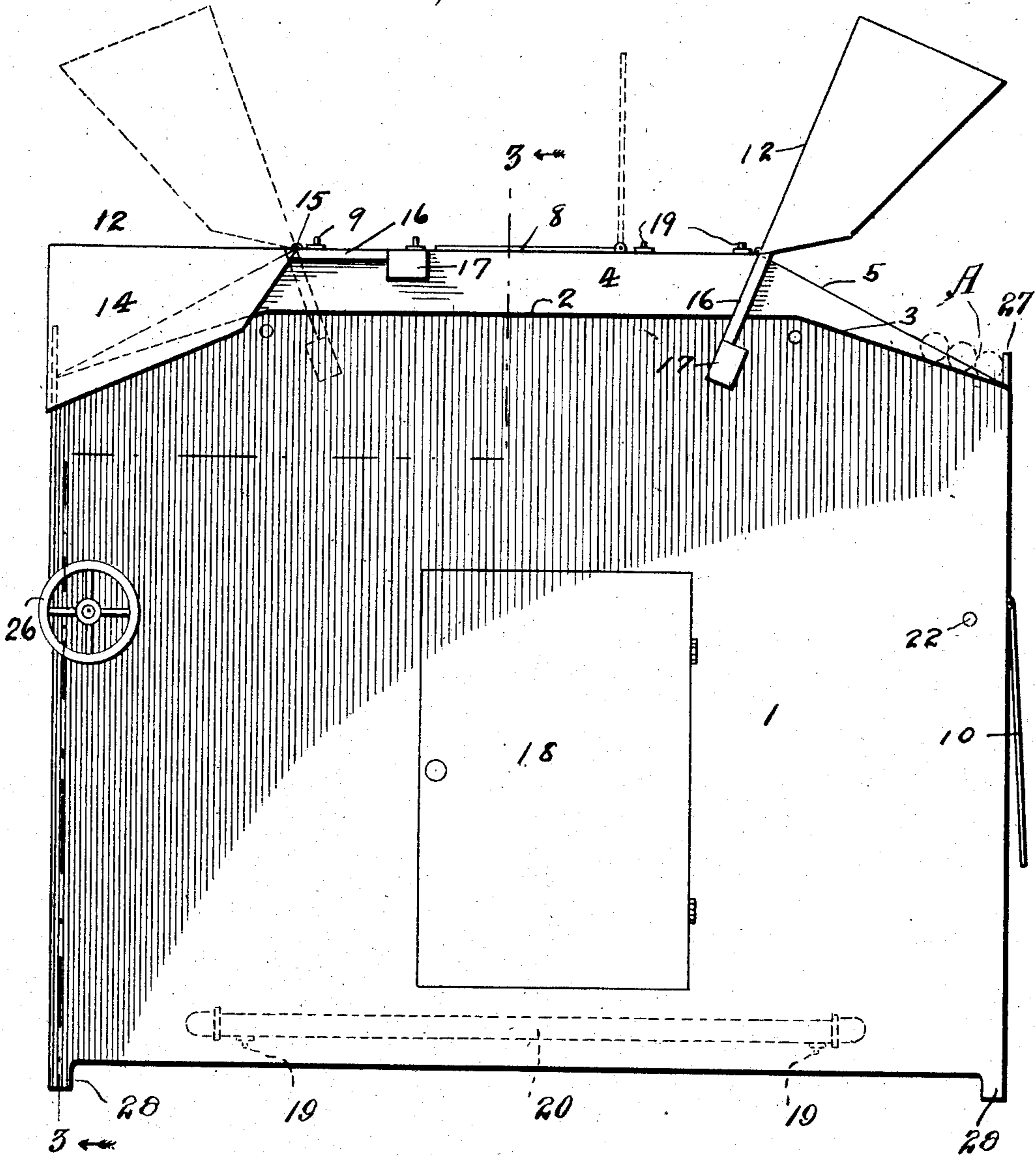
PATENTED SEPT. 3, 1907.

C. F. PEASE.
BLUE PRINT DRYING MACHINE.

APPLICATION FILED FEB. 15, 1907.

2 SHEETS—SHEET 1.

Fig. 1.



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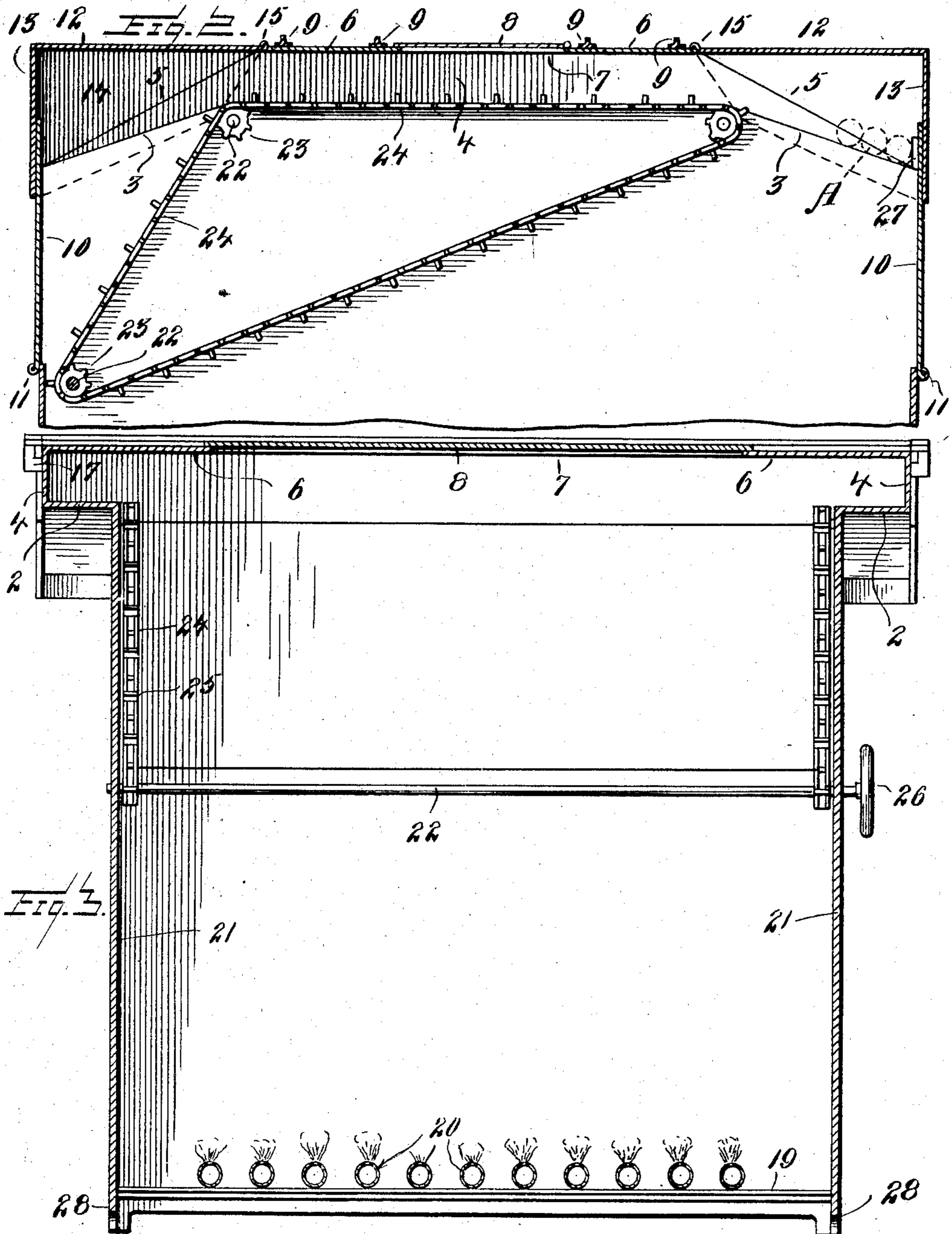
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2 SHEETS—SHEET 2.



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CHARLES F. PEASE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO WILLIAMS, BROWN & EARLE, OF PHILADELPHIA, PENNSYLVANIA, A FIRM.

BLUE-PRINT-DRYING MACHINE.

No. 865,057.

Specification of Letters Patent.

Patented Sept. 3, 1907.

Application filed February 15, 1907. Serial No. 357,545.

To all whom it may concern:

Be it known that I, CHARLES F. PEASE, 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 Blue-Print-Drying Machines, of which the following is a specification.

This invention relates to new and useful improvements in driers and it has particular reference to an apparatus for drying blue prints after the washing operation.

The invention aims as a primary object to provide an apparatus of the above type involving a novel combination, arrangement and construction of elements, and generally speaking comprises a casing containing a heater and having endless conveyer chains movable therethrough above the heater.

The detailed construction will appear in the course of the following description in which reference is had to the accompanying drawings forming a part of this specification, like characters of reference designating similar parts throughout the several views, wherein,

Figure 1 is a side elevation of a drying machine constructed in accordance with my invention. Fig. 2 is a fragmentary central longitudinal section thereof, and Fig. 3 is a vertical transverse section on the line 3-3 of Fig. 1, looking in the direction of the arrow.

In the practical embodiment of my invention I employ a casing 1 of rectangular outlines, which at its upper portion has its sides extended outwardly to afford lateral shelves 2 on each side of said casing, which along their central portions are level, but which at their ends are inclined downwardly as at 3 to facilitate the introduction and removal of the prints. A portion of the material of the casing is extended vertically above said shelves, to form continuations 4 of the sides of the casing, the portions 4 having their edges inclined downwardly at their termination as at 5 in convergent relation to the inclined ends 3 of the shelves 2. The side portions 4 centrally of their length are bent inwardly in a horizontal plane as at 6 to afford a top portion, within which is provided a central opening 7 normally closed by a pivoted door 8 designed to be swung upwardly as is shown in Fig. 1. It will of course be understood that the top portion 6 is integral throughout its area and serves to unite the sides of the casing 1. In this relation the top 6 constitutes the roof of the casing and is braced by angle irons 9, extending transversely thereacross.

The end walls are cut away adjacent their upper edges to afford access to the interior of the casing, and the cut away portions are closed by outwardly swinging doors 10, hinged at their lower ends to said end walls

as at 11. The end edges of the roof 6 terminate adjacent the inclined edges 5, so that an open space is afforded which communicates at each end of the casing, from the top with the interior thereof, and these open spaces are closed by doors 12, having depending end walls 13 and depending side walls 14. The end walls 13 are designed to overlie the doors 10 and to sustain the same in their raised position, as is shown in Fig. 2. The depending side walls 14 overlie the side portions 4. The doors 12 are hinged as at 15 to the ends of the top 6 and at each side are provided with inwardly extending rigid arms 16 which at their outer ends carry counter-balance weights 17. The casing 1 is provided in one side thereof with an enlarged door 18 which may be opened when so desired to obtain access to the interior thereof. In the lower portion of said casing are provided horizontal angle irons 19 which constitute shelves to support a heater 20, the latter being of any approved form, such for instance, as gas tubing having suitable burner openings.

It will be seen from the previous description that the body portion of the casing is of constricted width between its side walls, which for the purposes of illustration are designated 21. A series of stub shafts 22 are journaled in the walls 21 and carry sprockets 23 over which are trained conveyer chains 24 having outwardly extending projections 25. By reference to Fig. 3 it will be noted that the chains 24 are arranged at each side of the casing and move in parallelism. The shafts 22 are so arranged that a part of the travel of the chains 24 is in a plane flush or coincident with the planes of the level or horizontal central portions of the shelves 2. The lower-most of the shafts 22 extends continuously transversely across the casing and has one end thereof projected through the side 21 and provided with a hand wheel 26, by which said shaft and consequently the chain 24 are driven.

In practical use the prints are mounted on rollers. The doors 12 are opened by swinging them to the dotted line position of Fig. 1, in which operation they release the doors 10 and permit the latter to drop by gravity, as is shown at the left hand side of Fig. 1. The rollers carrying the prints are then introduced into the casing and are moved along the inclined portions 3 of the shelves 2 until they are engaged by the projections 25 of the chains 24, at which time they are moved by said chains along the shelves 2 to the opposite end of the casing, where they roll by gravity down the inclined portions 3 at said opposite end and are discharged as is indicated in Fig. 1, the rollers being designated A. For the purpose of preventing the rollers from dropping on the floor as they gravitate down the

inclined portions 3, vertical restraining posts 27 are provided at the upper corners of the casing 1 and at the lower ends of said shelves.

In order to more effectually preserve a free draft 5 through the casing and assure of the even distribution of the heated air upon the prints, said casing is preferably formed without a bottom and is supported with its lower edge above the floor upon legs or casters 28.

While the elements herein shown and described 10 are well adapted to serve the functions set forth, it is obvious that various minor changes may be made in the proportions, shape and arrangement of the several parts without departing from the spirit and scope of the invention as defined in the appended claims.

15 Having fully described my invention I claim:

1. A blue print drying machine comprising a casing having at its upper end off-set horizontal shelves on each side thereof and terminating in inclined end portions, and an endless conveyer working in said casing, said casing having 20 door controlled openings at points adjacent said conveyer.

2. A blue print drying machine comprising a casing having at its upper end off-set horizontal shelves on each side thereof and terminating in inclined end portions, and an endless conveyer working in said casing, and having a portion of its travel parallel to and in a plane coincident 25 with said shelves said casing having door controlled openings at points adjacent said conveyer.

3. A blue print drying machine comprising a casing having at its upper end off-set horizontal shelves on each side thereof and terminating in inclined end portions, means 30 for heating the air within said casing, and an endless conveyer working in said casing and having a portion of its travel parallel to and in a plane coincident with said shelves.

veyer working in said casing and having a portion of its travel parallel to and in a plane coincident with said shelves.

4. A blue print drying machine comprising a casing having at its upper end off-set horizontal shelves on each side thereof and terminating in inclined end portions, and an endless conveyer working in said casing and having a portion of its travel parallel to and in a plane coincident with said shelves. 35

5. A blue print drying machine comprising a casing having at its upper end off-set shelves terminating at their ends in downwardly inclined portions, said casing having at its ends, doors extending the entire width thereof adjacent said inclined shelves, and an endless conveyer working in said casing and having a portion of its travel parallel to and in a plane coincident with said shelves. 40

6. A blue print drying machine comprising a casing having its sides off-set horizontally adjacent their upper edges to afford shelves, said off-set portions being downwardly inclined at each end thereof, said casing having portions cut-away from its top wall and from the end walls adjacent thereto, downwardly swinging doors provided upon said end walls, swinging doors provided at the ends of said top wall, and having depending portions adapted to overlie said first named end doors, and an endless conveyer working in said casing and having a portion of its travel parallel to and in a plane coincident with said shelves. 45

-In testimony whereof I affix my signature in presence of two witnesses. 50

CHARLES F. PEASE.

Witnesses:

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