

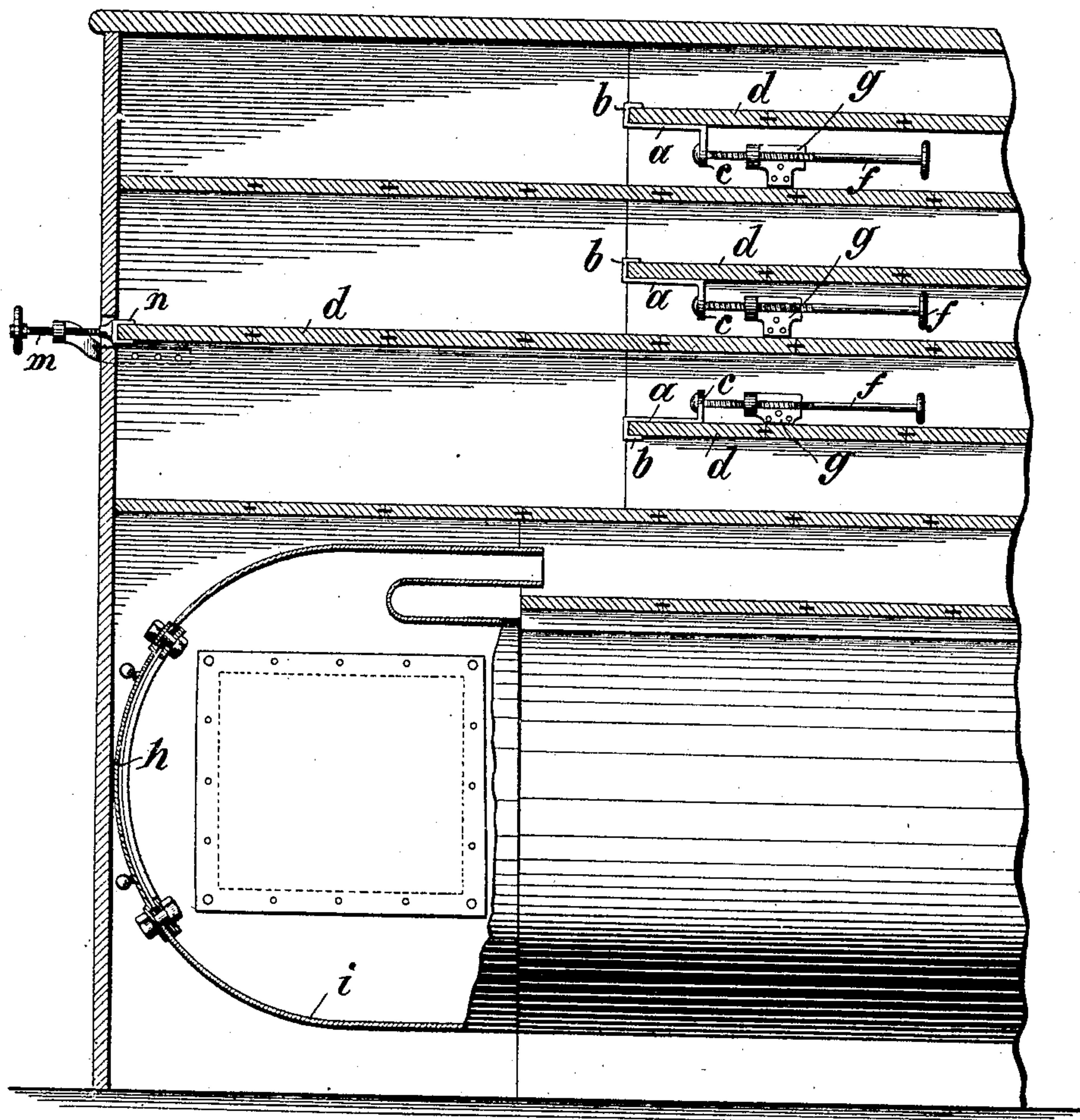
No. 835,168.

PATENTED NOV. 6, 1906.

J. TATTERSALL.
DRYING APPARATUS.
APPLICATION FILED MAR. 9, 1904.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses:
James F. Mansfield
L. E. Witham.

Inventor:
John Tattersall.
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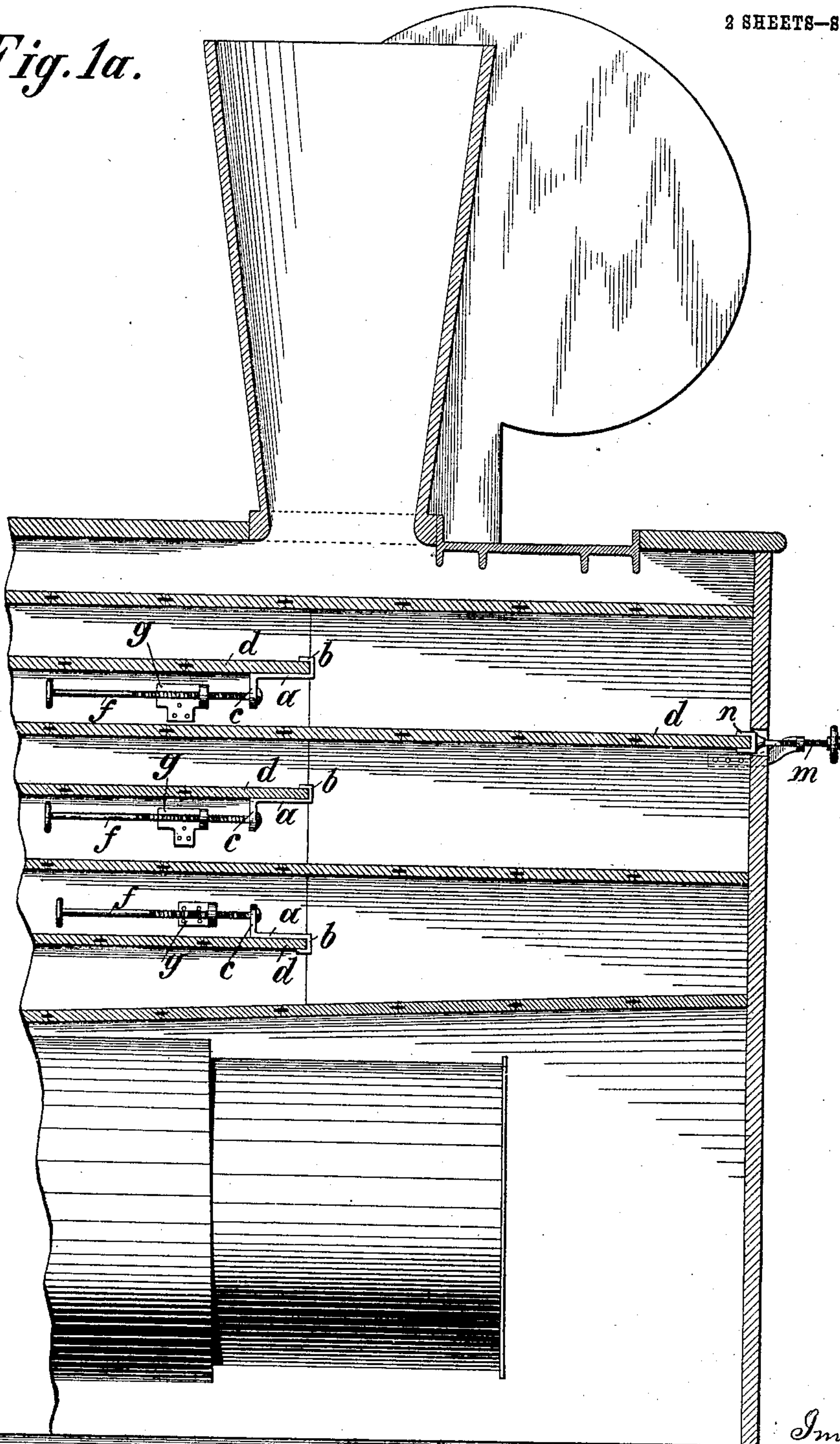
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2 SHEETS—SHEET 2.

Fig. 1a.



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UNITED STATES PATENT OFFICE.

JOHN TATTERSALL, OF ENSCHEDE, NETHERLANDS.

DRYING APPARATUS.

No. 835,168.

Specification of Letters Patent.

Patented Nov. 6, 1906.

Application filed March 9, 1904. Serial No. 197,589.

To all whom it may concern:

Be it known that I, JOHN TATTERSALL, a subject of the Queen of the Netherlands, residing at Enschede, Kingdom of the Netherlands, have invented new and useful Improvements in Drying Apparatus, of which the following is a full and complete specification.

This invention is an improvement in drying apparatus particularly adapted for drying yarns and threads, wherein the usual ledges or supporting bars and blocks are dispensed with and the partitions or floors are formed of transversely-disposed boards, U-shaped irons being used in order to prevent warping of the supporting-bars and the boards laid upon them.

The improvement in the apparatus above described consists, essentially, of an adjusting device within or outside of the drying-chamber in order to close up the joints between the transverse wooden partitions when they come apart, owing to their getting dried up or the effects of other influences, and thus form spaces through which the air short-circuits from one chamber to the other.

It consists, furthermore, of an air collector or reservoir provided with an arc-shaped wall which is mounted at the outlet end of the heating-chamber. It serves as a dry-air receptacle and is provided with a door for purposes of inspection or cleaning. From the air collector or reservoir the heated air is distributed throughout the whole breadth of the drying-chamber beneath the yarn to be dried.

In the accompanying drawings, which illustrate this invention, Figure 1 is a longitudinal sectional view of part of the apparatus, and Fig. 1^a is a similar view showing the part of the apparatus omitted in Fig. 1.

Within the drying-chambers there are several adjusting devices which engage with the ends of the drying-floors of the several chambers. The adjusting device may consist, for instance, of a bent piece *a*, whose one part *b* is adapted to grip or embrace the exposed longitudinal side or edge of the end boards *d*, while the other part *c* is formed as an abutment for a screw *f*, which works through a

fixed nut carried in a bearing *g*, attached to the side wall. The adjustment-screw *f* may also be connected with the piece *a* in any other suitable manner in order to impart movement thereto on rotating said screw.

In the construction shown the piece *a* on rotating the screw *f* in the desired direction moves inward or is carried along by the said screw, which can move backward or forward through the fixed nut of the bearing. In this way the several boards *d* of the drying-chamber are pressed together laterally. Furthermore, the adjusting device can also be used for closing up the boards or walls of the drying-chamber from the outside. In this case the screw *m*, working through a fixed nut, terminates in or carries a U-shaped piece *n*, adapted to engage the edge of the outer boards, as above described.

The air collector or reservoir *i*, having an arc-shaped end piece or wall to direct the air to the outlet, is mounted at the end of the heating-chamber and is made in such way that the air is compressed or constricted before it escapes. The heated air is then distributed, under pressure and at a great speed, over the yarn passed through the drying-chambers. To enable the air-collector to be examined or cleaned without removing it from its position, it is provided with a door *h*, which serves as a means of access thereto.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination of an apparatus for drying yarn and the like having a series of drying-chambers separated by floors formed of transversely-arranged boards; with adjusting devices for pressing the boards laterally together each device comprising a bent piece *a*, having a part *b* adapted to engage the edge of the board, and a part *c*, and a screw *f* pivotally engaged with part *c* and a fixed nut engaged by said screw, as set forth.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

JOHN TATTERSALL.

Witnesses:

ELKE JANS BUMA,
GREELT VAN DER MEULEN.