

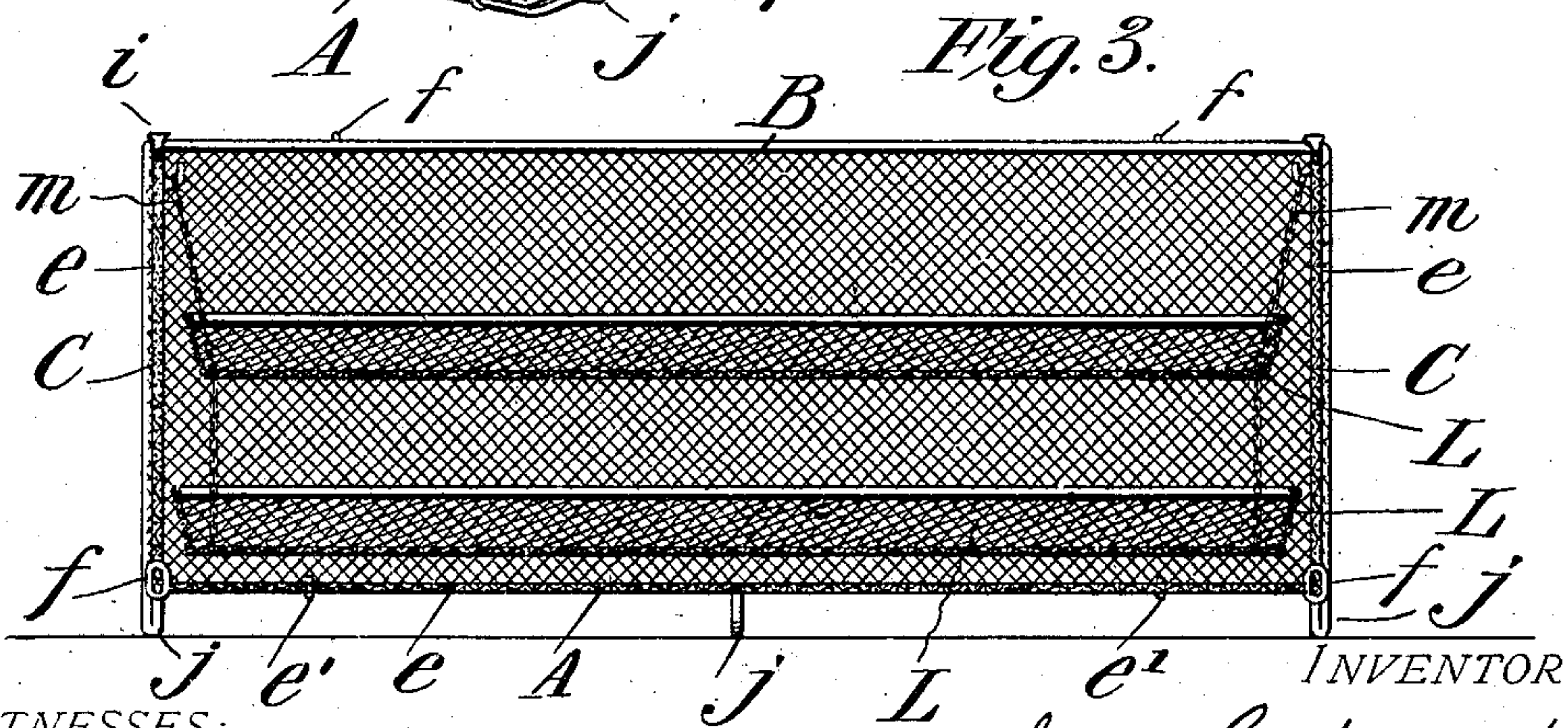
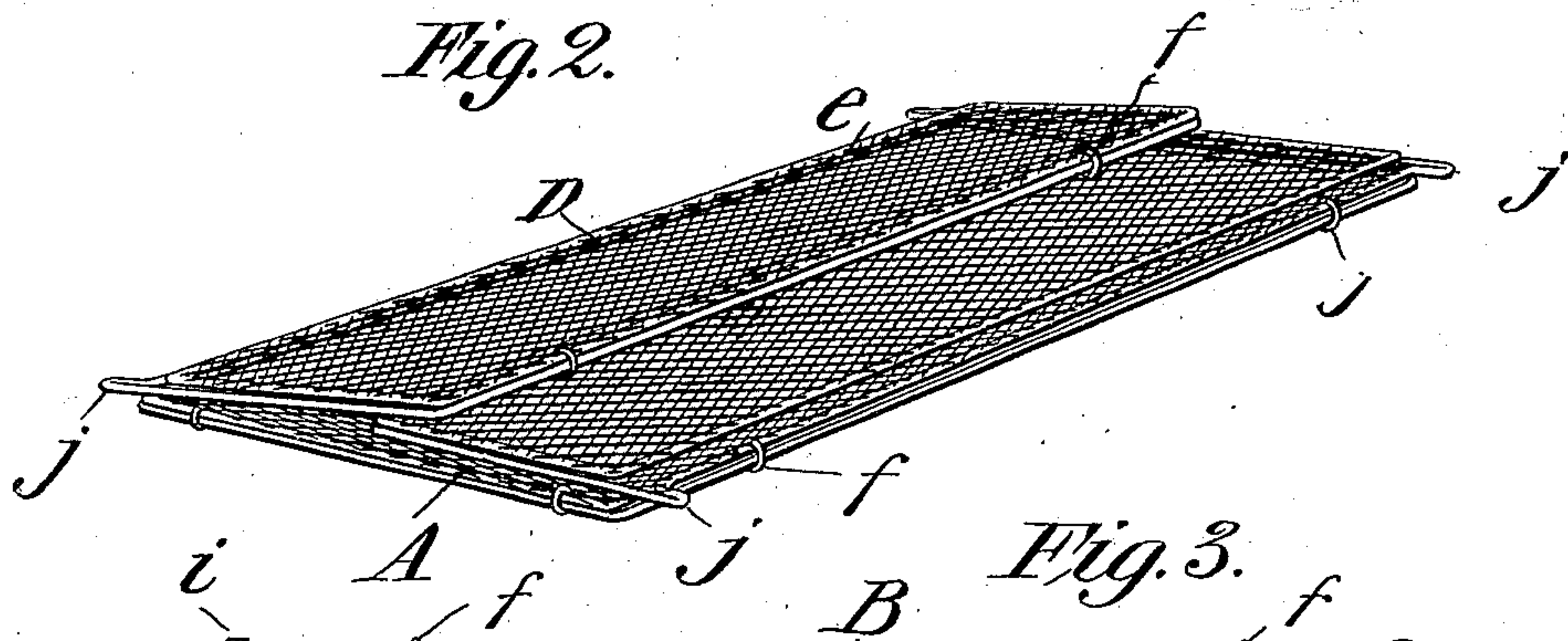
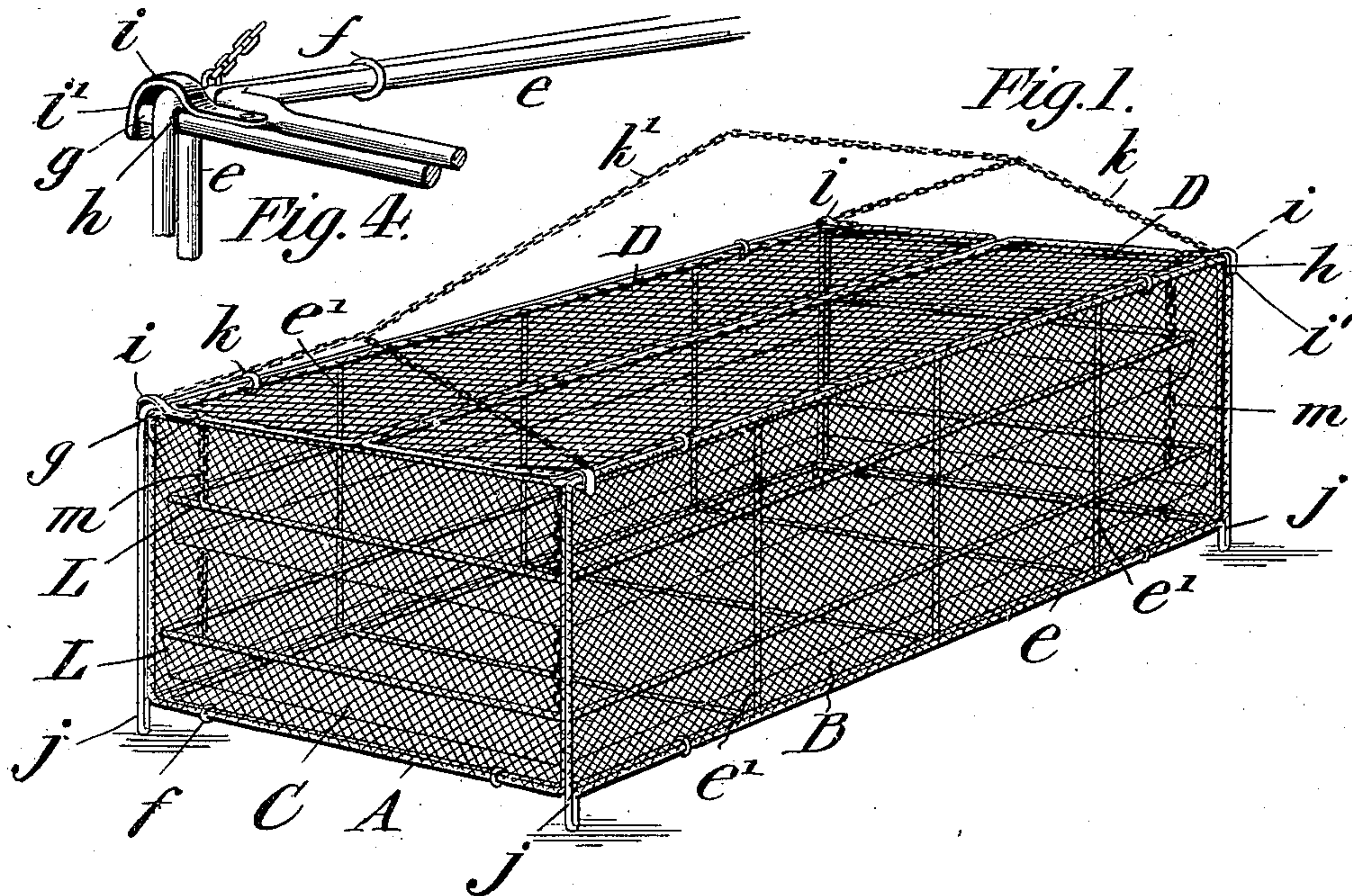
No. 660,994.

Patented Oct. 30, 1900.

J. G. MASTIN.
STERILIZING CASE.

(Application filed Jan. 11, 1900.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES GRANVILLE MASTIN, OF CHICAGO, ILLINOIS.

STERILIZING-CASE.

SPECIFICATION forming part of Letters Patent No. 660,994, dated October 30, 1900.

Application filed January 11, 1900. Serial No. 1,116. (No model.)

To all whom it may concern:

Be it known that I, JAMES GRANVILLE MASTIN, a citizen of the United States, residing at 824 Walnut street, Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sterilizing-Cases; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to sterilizers, and is directed more particularly to improvements in receptacles for holding surgical and other instruments and vessels while being subjected to a sterilizing or antiseptic bath, the object of the invention being the production of a box or case pervious to the sterilizing agent and constructed of material which is not affected by the agent and which is by preference collapsible, whereby it is foldable into a small compass when not in use.

The nature of the invention will be readily comprehended by reference to the following detailed description and to the accompanying drawings, in which—

Figure 1 is a perspective view of a sterilizing-case embodying my invention. Fig. 2 is a perspective view of the case in folded condition. Fig. 3 is a longitudinal sectional view of the case containing instrument-supporting trays. Fig. 4 is a detail view of one of the corner-fastenings.

Referring to the drawings by letter, A denotes the bottom of the case; B B, the sides; C C, the ends, and D the cover, the latter being preferably formed in sections. Each of the case parts is separately constructed of a rectangular frame *e* of stout wire, and the bottom A and sides C are provided with strengthening wire braces *c'*, placed at intervals. The case parts, to be pervious to the sterilizing agent, are made preferably of woven wire sufficiently heavy to resist the strain to which it is subjected. The material of the woven wire is by preference aluminium; but other metals which are unaffected by the sterilizing agent may be employed—as, for instance, copper. The sides and ends are

hinged to the bottom, and the top sections are hinged to the sides, the preferred form of hinges being rings *f*, which encircle adjacent frame-wires *e*. Any other suitable form of hinge may obviously be employed. This sectional construction enables the case to be folded as shown in Fig. 2, and when in such collapsed condition it occupies but little space and may be readily conveyed from place to place without inconvenience. When set up for use, the sides and ends are secured together, the preferred fastening means consisting of pins *g* at the upper corners of the ends, which enter holes *h* in the upper corners of the sides, and to maintain the engagement spring-catches *i* are provided on the ends, which catches have an intumed end *i'*, which contacts with the end of the pin and holds the side against movement. By lifting the spring-catch the end of the pin is uncovered, and the side is thus free to be disengaged from the pin.

The case is provided with short legs *jj* to support it free from contact with septic surfaces or objects. These legs, which may be formed by bending the wire of the frame, as shown in Fig. 3, are disposed at the corners of and centrally of the bottom, whereby the latter is prevented from sagging under the weight of the contents. At each end of the case are chain-bridles *k*, to which is attached a chain *k'*. This chain affords a ready means for lowering the case into and raising it from the sterilizing-bath.

L L denote trays which are suspended in the case to afford supports for the instruments or vessels, but which may also be employed in lieu of the case in subjecting the instruments or vessels to the action of the agent. The trays, of which there may be two or more, are each constructed of woven wire strengthened by a stout wire framework, and the edges of the tray are of sufficient height to accommodate a number of instruments or vessels. For economy of space the trays are made to fit one within the other, and chains *m* are employed to connect the trays and to afford means by which they may be lowered into the case or into the bath when they are used in lieu of the case.

When not in use, the case and trays in a folded state are packed in a surgeon's, den-

tist's, or other bag or receptacle where but little space is taken up and little weight added; but when set up the case and trays afford space for a comparatively large number of instruments, vessels, and the like, which constitute its contents. In using the case it, with the contents, is lowered into the sterilizing-bath—for instance, hot water—and after immersion for the proper length of time the case is raised and the instruments taken out for use. The material of the case being pervious the agent enters it at all points and comes into contact with the contents, thoroughly sterilizing them, and when the case is removed from the bath the contents are drained of the agent, as will be understood.

The simplicity of the case precludes disorder and enables its construction at a low cost. The sectional construction which permits of folding enables the cases to be shipped at a low cost by reason of the small space which it will occupy.

I claim as my invention—

1. A collapsible sterilizing-case constructed of woven wire having a bottom, and sides and ends hinged to the bottom to be folded thereagainst, catches at the upper corners of the sides and ends to secure them together when set up, said catches each comprising a

pin adapted to pass through an aperture, and a spring removably covering the end of the pin, a top hinged to the case side, trays of pervious material adapted to fit one within the other and to be suspended in the case when set up, and a flexible handle for the case.

2. A collapsible sterilizing-case constructed of non-oxidizable woven wire having a bottom strengthened at intervals and provided with supporting-legs, and sides and ends hinged to the bottom to be folded thereagainst, catches at the upper corners of the sides and ends to secure them together when set up, said catches each comprising a pin on a case end adapted to pass through an opening in a case side, and a spring removably covering the end of the pin, a top formed in sections each of which is hinged to a case side, woven-wire trays adapted to fit one within the other, chains to suspend the trays at different planes in the case when set up, and a flexible handle for the case.

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

JAMES GRANVILLE MASTIN.

Witnesses:

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