

# UNITED STATES PATENT OFFICE.

PETER LAWSON, OF LOWELL, MASSACHUSETTS.

## IMPROVEMENT IN COMPOSITION DRAWING OR ROVING CAN FOR USE IN THE MANUFACTURE OF YARNS.

Specification forming part of Letters Patent No. **90,109**, dated May 18, 1869.

*To all whom it may concern:*

Be it known that I, PETER LAWSON, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Composition, Drawing, or Roving Can for use in the Manufacture of Yarns; and I hereby declare the following to be a full and exact description of the same.

A large number of cans is required to contain the rovings from cards or drawing frames in the manufacture of yarns. These cans are usually made of sheet metal. Even when made of the lightest metal of sufficient strength they are quite heavy, too heavy to be conveniently lifted and carried by the class of female operatives usually assigned to this work without serious injury to their health. These sheet-metal cans are also easily indented and bruised, more especially at the bottom when they run out of true, and cannot be used on the turn-table, as the presser or plunger cannot act till repaired at an expense as great as the original cost of my can. The object of my invention is to produce a lighter, cheaper, and more durable can from fibrous and pulpy materials. The material which I prefer is paper, either in the form of sheets or molded from pulp or from raw felted or woven fiber.

The following description will enable others to make and use my invention.

I take a cylindrical form of the size of the can to be made and wind around it sheets of paper till a proper thickness is reached, pasting each layer as it goes on. The paper used may be such as is commonly employed for making straw-board, pasteboard, and the like, or the ordinary tarred-board; or the fresh sheet of paper just from the paper machine may be wound directly onto the cylindrical former, and it will adhere and felt together so as to be united. This may then be stiffened with size, glue, or other glutinous or adhesive material. To give the cans an ornamental appearance I cover and line them with any smooth-surfaced paper, either colored, printed,

or white. An additional protection in the form of water-proof or other varnish may also be applied to the can to keep the oil from penetrating them, also that they may be washed. To give strength to the upper and lower edges of the can, I apply the ordinary can-rings. The bottom I prefer to make of wood in the ordinary manner, but other material may be used. A bottom may be molded or formed of paper or paper pulp.

I do not limit myself to the mode above described for forming the can, since this may be greatly varied, as occasion may require.

I have described a plain cylindrical can, but the surface may, if desired, be corrugated or formed of any ornamental design. The can made according to my invention is light, elastic, durable, and in every way superior to the old metal cans, and much cheaper. The weight of cans formed according to my invention is not much more than one-third that of the metal cans. By a proper selection of materials and care in putting them together even this weight may be reduced.

I have mentioned the ordinary fibrous materials. There is a large class of such materials that may be used. Paper, paper pulp of all kinds, ground leather, leather paper, parchment, vegetable parchment, in fact all fibrous and textile materials, when united by size, paste, cement, or by felting, may be employed to form a roving can according to my invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

The improved composition can for rovings made of paper, paper pulp, or other fibrous materials united, substantially as and for the purpose herein described.

PETER LAWSON.

Witnesses:

JOHN S. HOLLINGSHEAD,  
A. M. HOBBS.