UNITED STATES PATENT OFFICE.

CHARLES GOODYEAR, OF ROXBURY, MASSACHUSETTS.

IMPROVEMENT IN THE MANUFACTURE OF GUM-ELASTIC SHOES.

Specification forming part of Letters Patent No. 849, dated July 24, 1838.

To all whom it may concern:

Be it known that I, CHARLES GOODYEAR, of Roxbury, county of Norfolk, State of Massachusetts, have invented a new and useful Improvement in Gum-Elastic Shoes; and I do hereby declare that the following is a full and

exact description of the same.

The gum, having been dissolved or not, is, as is usual for other purposes, first formed into thin sheets varying in thickness as may be required for various kinds of shoes. Two sheets of about an equal thickness and dimensions are used for a shoe. The last on which the shoe is formed is first covered with one of these sheets of gum. Cloth cut in pieces, tape, thread, or other fibrous substances (which have been previously covered with a solution of gum-elastic) are placed across the bottom, extending about half an inch up the sides of the shoe, as also at the toe and heel. These stays of any fibrous substance are intended to strengthen and also to prevent the shoe from cutting through upon the bottom and sides. They may be placed or woven at suitable distances from each other—say about half an inch—in various patterns, according to the fancy of the maker, and being disconnected do not prevent the shoe from being sufficiently elastic. heel-piece is next placed to stiffen it.

other sheet of gum, which forms the outside of the shoe, is then placed over the whole upon the last. The sole of the shoe is added next. All the parts being in an adhesive state when used are firmly joined together. An elastic binding, formed of gum elastic and thread or other fibrous substance, is then placed around the top to prevent the shoe from tearing. These shoes are afterward tanned or cured according to a chemical process as specified and patented by myself the 17th day of June, A. D. 1837.

These shoes, so constructed and tanned as hereinbefore described, are preferable to the imported article, inasmuch as they are made to fit exactly, are not liable to damage or tear, and do not sweat the feet, as do other gum-

elastic shoes.

What I claim as my improvement, and de-

sire to secure by Letters Patent, is-

The combination, in the manner above described, of gum elastic and any suitable fibrous substance, so arranged that the shoe may be strong, not liable to damage, and yet elastic and comfortable.

CHARLES GOODYEAR.

Witnesses:

Amos Winebertin, A. Peabody.