

*G. Sickels,*  
*Shoe Sole,*  
*N<sup>o</sup> 35329.* *Patented May 20, 1862.*

*Fig: 1.*



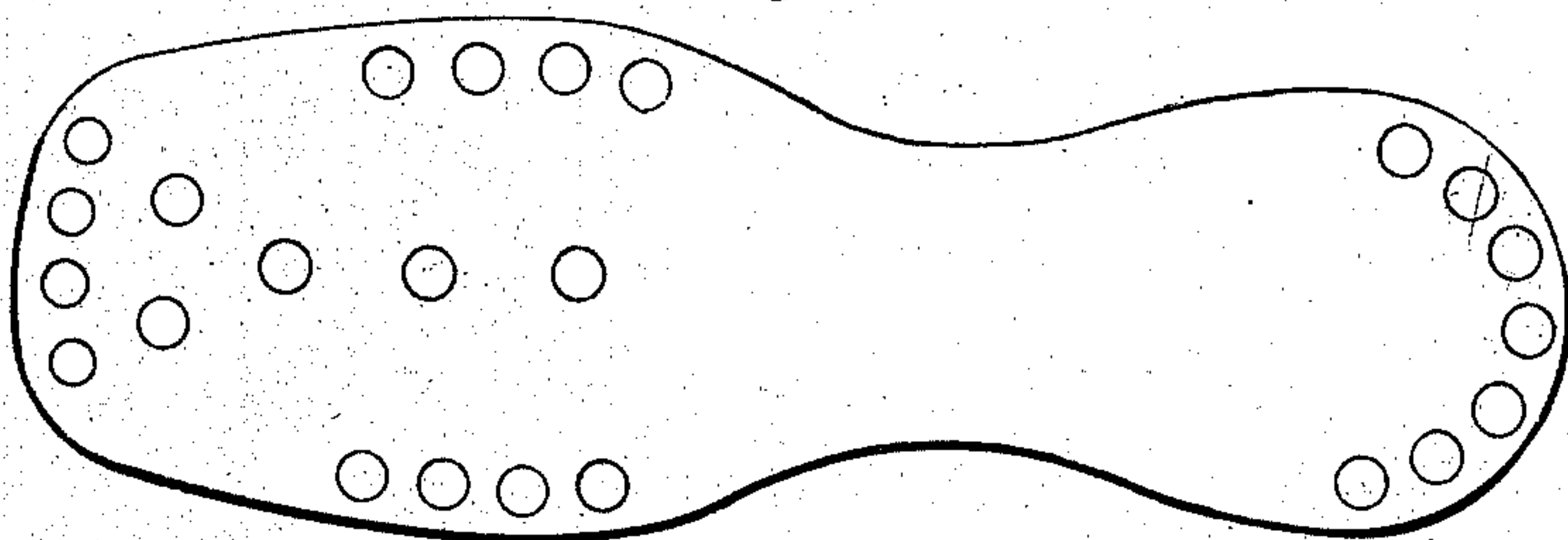
*Fig: 2.*



*Fig: 3.*



*Fig: 4.*



*Witnesses.*

*W. J. Coggins.*

*Inventor.*

*Gerard Sickels.*



# UNITED STATES PATENT OFFICE.

GERARD SICKELS, OF ROXBURY, MASSACHUSETTS.

IMPROVEMENT IN METAL PLATES FOR PROTECTING THE SOLES OF BOOTS OR SHOES.

Specification forming part of Letters Patent No. **35,329**, dated May 20, 1862.

*To all whom it may concern:*

Be it known that I, GERARD SICKELS, of the city of Roxbury, county of Norfolk, State of Massachusetts, have invented a new and useful Improvement in the Application of Metal to the Soles of Boots and Shoes, called "Shoe-Sole Protectors," for the purpose of economizing the wear; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of the article on a scale about four times larger than the size for use. Fig. 2 is a vertical view of the same. Fig. 3 represents a flat piece of metal of suitable shape to be converted into a protector, as hereinafter described. Fig. 4 represents a shoe-sole with protectors applied to it.

This invention consists in the application of small plates of metal to the soles, each plate having a series of points or spurs attached to the periphery, said spurs projecting at a right angle to the plane of the disk for the purpose of securing the plates firmly to the leather by merely driving them. It will be seen that by constructing these plates about the size of a large nail-head they may be applied to thin soles the same as to thick ones in just sufficient quantities to relieve the wear and not interfere with the elasticity or lightness of the shoe or boot, the several short points or spurs being situated around the periphery,

securing it more firmly than the ordinary one long stem or nail in the center of an ordinary nail head or plate which receives the wear. These articles are made by first punching or pressing blanks out from sheet metal, said blanks being shaped with wings or projections, around the periphery of which to form the spurs aforesaid. Said blanks are afterward passed through another die, which is just the size of the body of the blank or lozenge in order to turn the spurs up at a right angle to the disk thereof. The punch which drives the lozenge through the raising-die is fluted to receive the spurs as they are turned up in passing through the die, said flutes being graduated so as to draw out and sharpen the ends of the spurs, thereby fitting them to enter the leather easily and hold firmly.

Having thus described my invention, I claim as new therein and desire to secure by Letters Patent as a new article of manufacture—

A protector for the soles of boots and shoes, consisting of a small disk of metal formed with sharp points or spurs around its periphery projecting at right angles to the plane of the disk and adapted to secure it to the sole by driving into the leather, all as hereinbefore described.

GERARD SICKELS.

Witnesses:

HENRY J. CARTER,  
H. M. BARTLETT.