G. B. MASSEY & E. E. SPENCER.
Revolving-Heels.

No. 220,629. Patented Oct. 14, 1879.

Fig. 1.

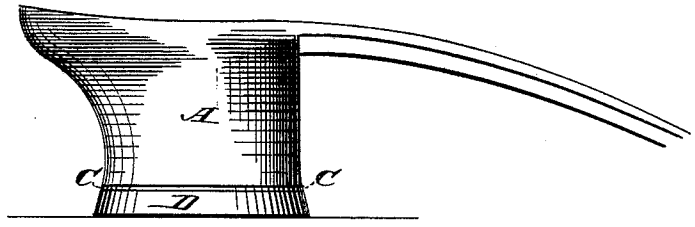


Fig. 2.

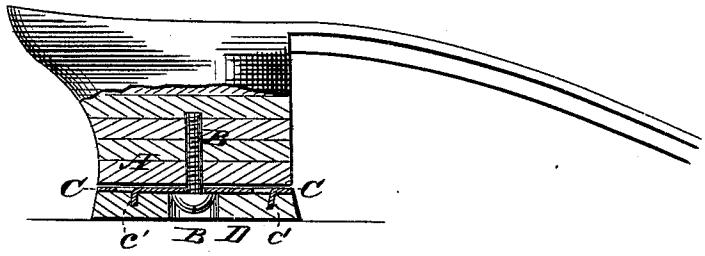
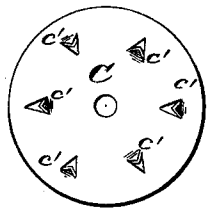


Fig. 3.



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GIDEON B. MASSEY AND EDWARD E. SPENCER, OF NEW YORK, N. Y.

IMPROVEMENT IN REVOLVING HEELS.

Specification forming part of Letters Patent No. **220,629**, dated October 14, 1879; application filed July 29, 1879.

To all whom it may concern:

Be it known that we, GIDEON B. MASSEY and EDWARD E. SPENCER, of the city, county, and State of New York, have invented a new and useful Improvement in Revolving Shoe-Heels, of which the following is a specification.

Figure 1 is a side view of a heel to which our improvement has been applied. Fig. 2 is a sectional view of the same. Fig. 3 is a detail view of the metal plate or disk.

The object of this invention is to furnish revolving shoe-heels which shall be so constructed that they will allow the curve of a French heel to be continued across the edge of the revolving part, and that will give no indication to a casual observer that there is any revolving part.

The invention consists in a rotating shoe-heel in which the metallic disk has slightly-inclined points or teeth cut out of and bent up from its solid substance in alternate directions, and driven into the leather disk, as hereinafter fully described.

Similar letters of reference indicate corresponding parts.

A represents the stationary part of the heel, to the center of the face of which is pivoted, by a screw, B, the movable or rotating part C D. The rotary part is formed by attaching a leather disk, D, to a metallic disk, C. The disk C has angular points or teeth *c'* formed upon it by cutting angular slits through it, and bending the points thus formed outward nearly at right angles. Some of the slits are cut with their angles toward the center of the disk C, and others with their angles toward the circumference of the said disk. This arrangement will cause some of the teeth to incline outward slightly, and others to incline inward slightly. The teeth *c'* are driven into the leather disk D, and their slight inclination causes their inclination to be slightly increased, producing a clinching effect.

With this construction, should the leather become wet and swell, it will be drawn more tightly upon the inwardly-inclined teeth, and should the leather become dry and shrink, it will be drawn more tightly upon the outwardly-inclined teeth, so that it will be held more firmly in either case. This construction allows the edge of the revolving part C D of the heel to be trimmed to correspond with the desired style of heel, and it may be flared, tapered, or made straight, as may be desired. The head of the pivoting-screw B passes through a hole in the center of the leather disk D, and rests against the metal disk C, so as to hold the rotating part firmly, while allowing it to rotate freely.

We are aware that plates have been provided with points thrown out; but they fail to hold, while ours will hold until the plate is worn as thin as paper.

What we claim is—

The combination, with the top or outer lift of a heel, of the circular plate C, having points alternately projecting in and out, as shown and described.

GIDEON B. MASSEY.
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Witnesses:
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