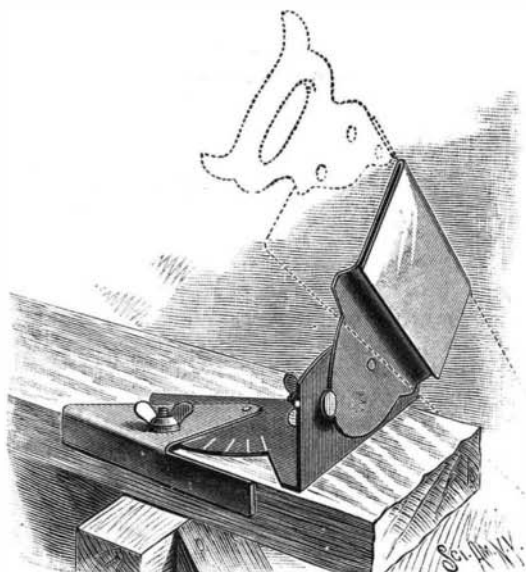


AN IMPROVED SAW GAUGE.

A saw gauge which can be readily applied to a block or board, and held firmly in place thereon to accurately guide the saw in the desired direction, is illustrated herewith, and has been patented by Mr. Edward S. Nixon, of Chattanooga, Tenn. In a flanged base plate, adapted to rest against the side or edge of any article



NIXON'S SAW GAUGE.

to be sawed, is mounted a set screw, against which rides the semicircular edge of a scale-marked and pivoted guide-holding plate, which can be fixed at any angle by the set screw. To the upright portion of the guide-holding plate is pivoted a saw guide, also held by a set screw at the desired inclination, and so that it can be lowered as the cut progresses, while the saw will be continually embraced by the parallel sides of the guide, and thus saw accurately in a plane at right angles to the edges of the board or block. In making light gauges it would not be necessary to make the tilting joint for the upright part of the guide, which could be made integral with the other portion of the guide. The saw used is a common hand or panel saw, and the device is well adapted for cutting miters and octagon or other shapes. The metal of which this gauge is made is light, and the construction so simple that it can be readily constructed by any good tinner.

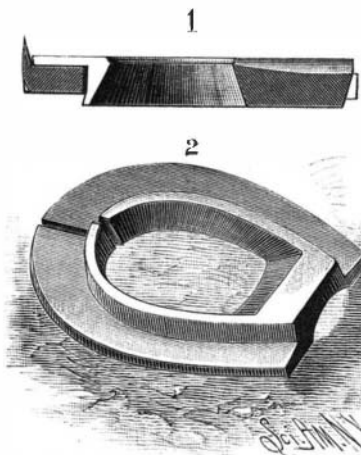
Color Blindness a Brain Affection.

Professor Ramsay believes that the particular defect giving rise to color blindness lies, not in the eye itself, but in the brain. Certain persons, he points out, are incapable of judging which of two musical tones is the higher, even when they are more than an octave apart. Yet, as such persons hear either tone perfectly, the defect is not one of deafness. He accordingly argues that in such persons the brain is at fault, and thence proceeds to the assumption that it may be equally true that the inability to perceive certain colors is not due to a defect in the instrument of sight by the eye, but to the power of interpreting the impressions conveyed to the brain by the optic nerve. If this is the case, the problem is no longer a physical one. It falls among those with which the mental physiologist has to deal.—*The Medical Press.*

AN IMPROVED HORSESHOE PAD.

Making the pad of a horseshoe with a beveled flange projecting down inside the shoe to prevent balling, and with a division or joint at its front end, whereby the pad may be expanded to suit the

size of the hoof, is a patented invention of Mr. William A. Taylor, of Washington, D. C., and is illustrated herewith, Fig. 1 showing a horizontal section from front to rear of the shoe. The pad is moulded of soft rubber, the exterior of the shoe fitting around the downwardly projecting flange, which extends about a



TAYLOR'S HORSESHOE PAD.

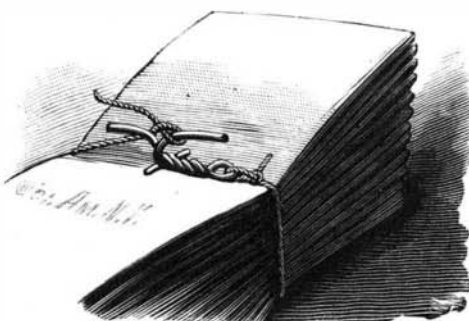
quarter of an inch below the shoe. The flange serves to hold the pad in place while the shoe is being nailed through the body of the pad, and by pressing against the ground tends to prevent slipping. The rear portion of the pad is made continuous, affording a solid bearing surface, while the flaring central opening allows snow to be easily knocked out, thus preventing balling, and the division in the middle at the front allows the pad to be easily expanded to the required dimensions.

Cheap Stationery.

It is a mistake to suppose that cheap stationery is a matter of economy, says the Appleton, Wis., *Post*. It should be borne in mind by every business man that his letter paper is his representative to many people who have never seen him, and who are likely to form their judgment of him, to a large extent, by the qualities of his proxy. A man who uses poverty-stricken stationery stands in a bad light to those he addresses himself to. For the sake of economizing a few cents he gratuitously prejudices himself in the opinion of many people who may be of importance to him; for good stationery is like a good suit of clothes, and so long as men continue to judge from appearances, they will find both of value to them.

AN IMPROVED CLEAT.

A device designed to afford a quick and secure tie, using one end of an attached string or tape only, is shown in the accompanying illustration, and has been patented by Mr. Charles P. Hawley, of No. 510 West 153d Street, New York City. It is preferably made of one piece of wire, bent to form a loop or eye, to which the tape or string is fastened, and then bent up and twisted to form a shank, with outwardly extending diverging arms integral with the shank, a guide

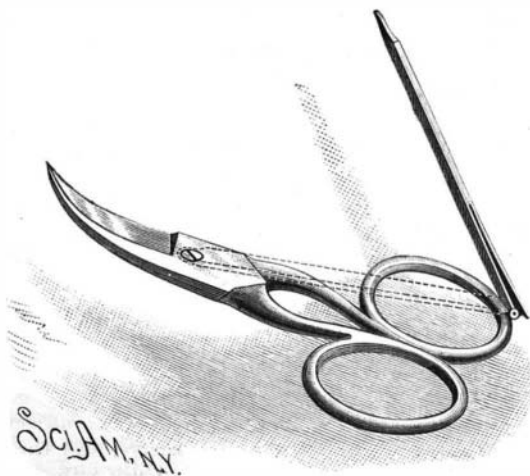


HAWLEY'S PORTABLE CLEAT.

bar being attached across the body at the bottom near the neck. The cleat may also be made of any size, and of one, two, or more pieces.

A COMBINATION TOILET IMPLEMENT.

A combination of a pair of scissors and nail file, wherein each is perfect in itself, making an article which can be conveniently carried in the vest pocket, is illustrated herewith, and has been patented by Mr. Charles P. Hawley, of No. 510 West 153d Street, New York City. A right-angular lug is provided on the rear of the eye of the scissors adapted to receive the thumb, forming a shoulder to which the file is hinged. The file is split horizontally to about its center, to form two portions, one portion being bent upon itself to form an eye by which the file is hinged to the shoulder, and the other portion acting as a spring against the shoulder to hold the file closed or partially or wholly opened.



HAWLEY'S COMBINED SCISSORS AND FILE.

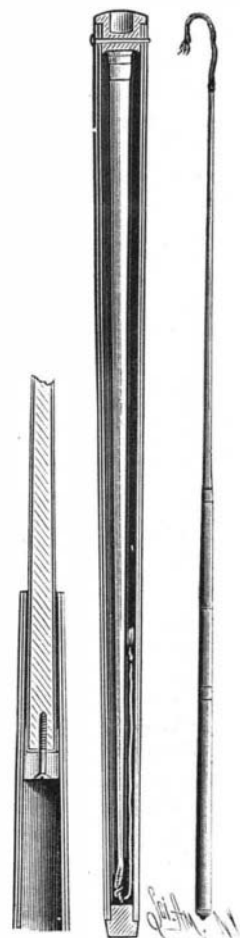
Both implements being commonly employed in dressing the nails, they are, when thus combined, at once in immediate hand for use.

THE *Railroad Gazette*, referring to the numerous patents on car couplers, and the difficulty experienced by the railroad officials in determining the lines of the future standard Janney type coupler, quotes the sayings of a facetious master mechanic. He suggests that car coupler inventors should turn their attention to an automatic locomotive engineer—one who would never look on the cup when it is red, never lose time, never have leaky flues or a hot box, and never misread orders, have a collision, or stick in a snow bank. He says he feels sure such an invention would attract the attention of our great railroad monopolists and fulfill a long felt want, especially if it could be warranted to run 200 miles after a nickel had been inserted in the slot.

"CHEESERINE" is the latest fraud in England. It has a suggestion of cheese, as American oleomargarine suggests butter.

A COMBINED WHIP AND CANE.

A construction designed to give greater strength, simplicity, and convenience than is usually obtained in a combined whip and cane is illustrated herewith, and has been patented by Mr. Owen Godward, of Salem, Ohio. The handle is a tapering, tubular body, preferably of iron, covered by suitable wrapping, such as ordinarily used on whip stocks. When used as a cane, the handle completely incloses a tapering whip section, of whalebone or other flexible material, covered with a suitable wrapping, the whip section being adapted to be drawn outward until its inner larger end binds snugly in the smaller open end of the handle, the whip section being held firmly in place by a screw passing through a frictional block which adheres closely to the metallic tubular body. The larger end of the handle is closed by a detachable plug, the outer end of which has a socket to receive the neck of a rubber or other suitable block when the article is used as a whip, the neck of the block also fitting the smaller open end of the handle to serve as a ferrule when the article is used as a cane.



GODWARD'S WHIP AND CANE.

Leather Board for Shoes.

The use of leather board in shoe manufacture is one of the shoddy features of the business. One kind is used for tapping and for veneering taps. The material is made to look like leather and to cut like leather. A thin split of true leather makes a veneer that satisfies the demands of the buffing machine.

The best board is made of such board stock as jute, manila, and the like, and this is used for counters, or boot and shoe heel stiffenings and for box toes. When properly treated and manufactured, these counters do good service. When leather board is backed with a leather split and moulded into a stiffening, the product is a union counter. Even chair seats are made from this board. It is worth five to twelve cents a pound.

A cheap leather board, worth three cents a pound, is used for inner soles, shanking, filling, and so on. Steel shanks are also covered with this, and inner soles, backed with cotton duck, are made of it. This is used, not to cheapen the cost of making the shoe, it is said, but to save the time of gathering and arranging leather scraps.—*Paper World.*

IMPROVED TONGS FOR HANDLING NAILS.

A hand implement or tool for handling nails in quantity is shown in the accompanying illustration, and has been patented by Mr. Andrew Wood, of Washington, Ky. The crossing levers or handle por-



WOOD'S NAIL TONGS.

tions of the tongs are extended to form jaws composed of a number of internally notched or serrated tines, the levers being pivoted to each other in close proximity to the bent tine portions. By this means an easy lift and secure hold of the nails in large quantity is obtained, the leverage being proportional to the length of the handles, on which both hands may be used, while the notched or toothed construction of the tines prevents the slipping or dropping of the nails.