

**AN IMPROVED UMBRELLA STAND.**

A device whereby a number of umbrellas may be rigidly held in such position as to present an attractive appearance is shown herewith, and has been patented by Mr. Jonathan Haight, of Pittsfield, Mass. The body of the stand has shoulders one above the other, the lowest shoulder being the largest, there being on the inner side of each of these shoulders, next the body of the stand, a V-shaped groove, in the bottom of which is a series of cavities, each adapted to receive the ferrule of an umbrella. To each of the shoulders is attached a disk having a series of essentially oval shaped openings to receive each an umbrella, and give it an inclination upward and

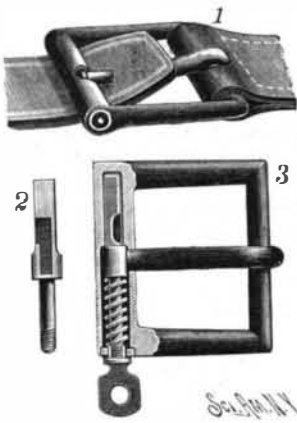


HAIGHT'S UMBRELLA STAND.

outward. In the top of the base of the stand vertical rollers are arranged upon a concentric line, the rollers being countersunk in the base in such manner that they will project but slightly above it, whereby the stand may be revolved and the umbrellas made to face in any given direction.

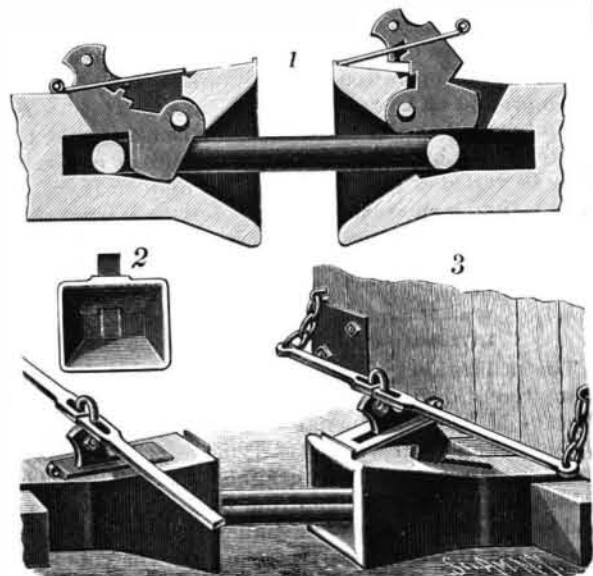
**AN IMPROVED LOCKING BUCKLE.**

A buckle in which the tongue is positively locked against the buckle frame is shown in the accompanying illustration, and has been patented by Mr. William Blum, of Newark, New Jersey. Figure 3 is a plan view of the buckle and its key, partly in section, Figure 2 being a side view of the locking bar detached, and Figure 1 a perspective. The front bar of the buckle frame is hollow and centrally notched for the entrance of the point of the tongue. Within the front bar is fitted a spring-actuated locking bar, angular at its inner end to prevent its turning, and threaded on its other rounded end to receive an internally threaded key, for partly withdrawing the locking bar against the tension of a spring coiled around it. Just beyond its center the locking bar is notched, and a longitudinal slot extends toward the center from the bottom of this notch for locking the tongue. The key is used to move the locking bar outward until its notch registers with the notch in the front bar of the buckle frame, and, when the key is removed, the spring pushes the locking bar inward, so that the notches are out of register, preventing the withdrawal of the tongue except by the use of the key.



**AN IMPROVED CAR COUPLING.**

An automatic car coupling in which a pivoted pin or dog is employed to engage the coupling link and hold it in position in the drawhead, and in which the parts will always be in a position for automatic coupling after the cars have been uncoupled, is illustrated herewith, and has been patented by Mr. Charles W. Chisholm,



CHISHOLM'S CAR COUPLING.

of No. 11 Patrick Street, Winnipeg, Manitoba, Canada. Fig. 1 shows a central longitudinal sectional view of the device as applied, Fig. 3 being a perspective, and Fig. 2 an end view of the drawhead. Within a vertical slot in the top of the drawhead a coupling dog is mounted, supported by a pivot passing through an aperture of larger diameter than itself in the dog. When in the coupling position, the lower portion of the dog rests within a recess in the bottom of the drawhead, the rear portion of the lower projection of the dog constituting the bearing face. As the link enters the drawhead, and strikes against the forward inclined face of the dog, the latter is forced to the position shown at the right in Fig. 1, the dog dropping back, when the link has passed in, to the position shown at the left in the same figure. The dog extends somewhat above the top of the drawhead, where it has a handle or lug, connected with a lever extending to each side of the car, by which the dog is manipulated. The dog may be locked in such position that the link may be withdrawn by lifting the dog until a shoulder thereon is brought into engagement with a notch in the top of the drawhead, but as the link is drawn out of the link recess it strikes against a projection of the dog, whereby the latter is returned to the position shown at the left in Fig. 1. A metallic cover is provided to prevent the entrance of gravel, snow, etc., when the parts are in coupling position.

**Medicinal Properties of Vegetables.**

The following information may be useful to some at this season of the year, if not new to many:  
Spinach has a direct effect upon the kidneys.  
The common dandelion, used as greens, is excellent for the same trouble.  
Asparagus purges the blood. Celery acts admirably upon the nervous system, and is a cure for rheumatism and neuralgia.  
Tomatoes act upon the liver.  
Beets and turnips are excellent appetizers.  
Lettuce and cucumbers are cooling in their effects upon the system.  
Onions, garlic, leeks, olives, and shalots, all of which are similar, possess medicinal virtues of a marked character, stimulating the circulatory system and the consequent increase of the saliva and the gastric juice promoting digestion.  
Red onions are an excellent diuretic, and the white ones are recommended to be eaten raw as a remedy for insomnia. They are a tonic and nutritious.  
A soup made from onions is regarded by the French as an excellent restorative in debility of the digestive organs.

**OPERATIVE DENTISTRY—FILLING TEETH.**

Dr. Charles H. Land, of No. 264 Woodward Avenue, Detroit, Michigan, has invented and covered by several patents a means of restoring decayed or imperfect teeth to their original shape, size, and color. The invention provides a method of moulding vitreous or other substance into sections corresponding to the form of the lost portions of decayed teeth, by swaging or burnishing a thin metallic matrix of suitable metal into the cavity of the tooth, and producing with such matrix a solid section or plug of any desired material corresponding to the shape of the cavity in the natural tooth, this plug being fixed in position by suitable cements, either with or without the matrix. The invention also covers the preparation of veneers of all forms and tints, to be kept in stock by dentists, a metallic cover being shaped to the outlines of the tooth to be crowned, the previously prepared porcelain veneer to be fitted to the cover, and fused thereto by an intermediate stratum of porcelain paste.

In Fig. 1 of the illustrations, 1 represents a tooth having a cavity needing filling; 2 and 3 show a matrix fitted to the cavity; 4 shows a filling fitted to the matrix; 5, a complete filling applied in the cavity; 8, another form of cavity in a tooth, and 11, a filling applied thereto; 9, a modification of the metallic mould plate, and 10, a filling fitted thereto; 6, a sectional view, showing the cavity partially filled with a soft filling; and 7, a modification of the matrix and plug for use therewith.

In Fig. 2 1 represents a typical view of decayed front teeth, and 11 shows them restored; 5 is a single tooth prepared for the fitting of the metallic cover; 6 is a modification, with the tooth built up with amalgam or other suitable substance; 7 shows the metallic cover prepared to fit the tooth, and 9 and 10 are side and perspective views of the porcelain veneer to fit the metallic cover, while 8 shows the metallic cover with the porcelain veneer fused upon it. A tooth prepared for a partial enameled cover is shown in 2, and 3 is a sectional view of a partial enameled cover applied to the tooth, 4 showing the cover separately.

In forming the matrix, platinum is preferably employed, although gold and silver or other material may be thus used, and in some cases pins are engaged with the matrix, porcelain, rubber, or glass, and in some instances metal, such as gold or silver, being used to fill it, although porcelain is preferred. The latter, with certain forms of rubber, may be modified in color to

approach the shade of the natural tooth, and will also take a durable polish. The thin piece of platinum plate may be readily swaged into the cavity of a tooth to make a perfect impression, while the porcelain paste built into the matrix may be readily carved or modified to imitate the original contour of the lost portion of the tooth, being then fused in the ordinary manner.

In the use of the previously prepared porcelain veneers, which are made as separate articles of manufacture, expressly for this class of work, a suitable veneer is selected and ground and fitted to its place, when it is engaged upon the metallic cover by using a porcelain body or paste, the cover, veneer, and porcelain body being fused together, the cover with its combined veneer being then cemented upon the tooth.

Dr. Land has also invented what he styles the "Midget" gas blast furnace and blowpipe combined,

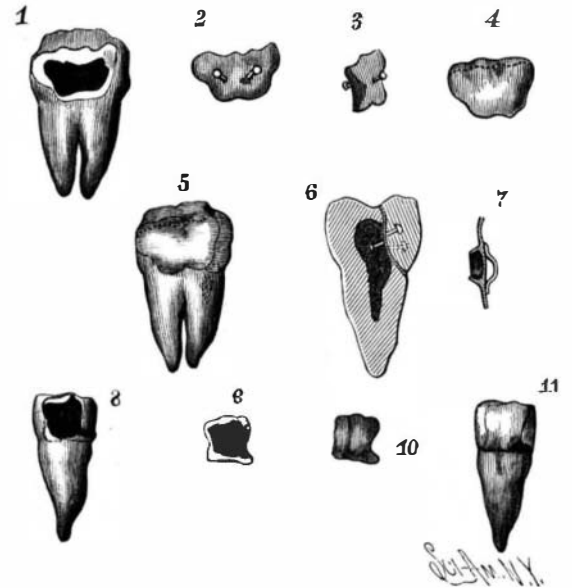


Fig. 1.—RESTORING DECAYED OR IMPERFECT TEETH

as an ideal furnace for the operative dentist, and for especial convenience in the fusing operations required with his porcelain fillings. The furnace complete, with blowpipe, stand, and bellows, does not occupy more than ten inches of space, and by its use the dentist can readily fuse high grade porcelain in from six to fifteen minutes. The Hydrocarbon Furnace Co., of Toronto, Canada, has been organized to introduce this furnace and Dr. Land's other dental inventions in Canada.

Dr. J. A. Robinson, of Jackson, Mich., president of the Michigan Dental Association, writes that "the new method invented by Dr. Land is a step forward in the dental art. It is a new method of the old plan of continuous gum work applied to teeth. We have removed large gold fillings in the front teeth and replaced them with porcelain caps, but the process was long and wearisome to the operator and patient. With Dr. Land's method most of the work is done in the laboratory, when the patient is dismissed until the cap is enameled,

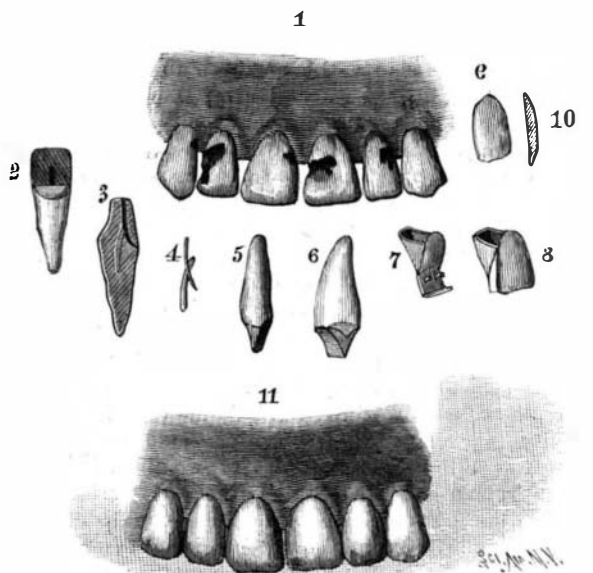


Fig. 2.—RESTORING DECAYED OR IMPERFECT TEETH.

and then it is inserted in a very short time. The great advantage of the new system is the most perfect adaptation and the means brought about to accomplish the result by his new furnace and a series of different colored bodies, matrices, etc., to obtain the exact shape and shade of the natural teeth. These fillings are to take the place of all other fillings, from the smallest filling to the entire crown of the tooth."

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