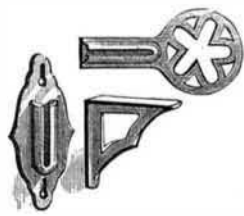


RECENT INVENTIONS.
Adjustable Bracket.

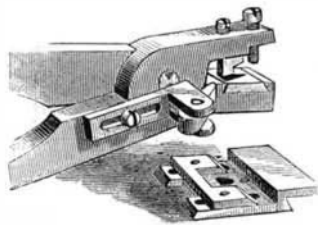
This invention is applicable to brackets, stands, or shelves for holding pots or other vessels, containing water or other fluids to be heated over the flame of a lamp or gas burner. It consists in a bracket of novel and simple construction, in which provision is made for both the vertical and horizontal adjustment of the table or stand portion, and the projecting portions of the bracket when in the way may be readily removed from the fixed part, and the whole when dismembered knocks down into a flat space, to facilitate transportation or packing away. The bracket when in use in no way interferes with the light from the gas or lamp burner, and when used in connection with a lamp, the stand is situated so as to be about half an inch above the lamp shade. A portable bracket made in this way is very convenient in bed rooms and many other places.



This invention has recently been patented by Mr. John H. Eager, corner Penniston and Prytania streets, New Orleans, La.

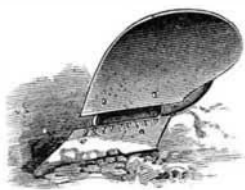
Combined Saw Set and Gummer.

This invention consists of a pair of tongs provided with dovetail grooves in the inner surfaces of the jaws for receiving dies, with a check screw and nut for limiting the motion of the jaws, and a saw guide formed of a block pivoted between two jaws projecting from a plate held adjustably to the side of the tongs by a set screw, so that teeth will be cut in a saw placed between the jaws when the jaws of the tongs are pressed together. The instrument is provided with a plate to be secured on the lower jaw, and provided with a saw guide extending across it, so that the teeth of a saw placed on the plate will be bent or set by pressing the jaws of the tongs together. This part of the invention is shown in the detached view. The tool is very simple, portable, and easily operated and kept in order. Further information in regard to this invention may be obtained by addressing the inventor, Mr. E. A. Parks, 109 St. Charles street, New Orleans, La.



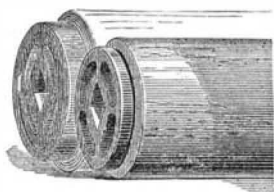
Improvement in Plows.

The engraving represents an improvement in the construction of plows for venting the surface of the share and mould board to relieve the atmospheric pressure and enable the plow to run easier. There is an open space along the joint between the share and the mould-board, with notches in the share at the margin of the open space to permit the air to circulate. A tubular air conductor is so applied as to discharge air into the air space if desired, a suitable air forcing apparatus being for that purpose applied to the plow. The surface of the mould board is arranged a little back of the surface of the share to facilitate the circulation of air under the furrow-slice. When the tubular conductor is employed the bars connecting the mould board and share are suitably curved to receive and hold the conductor between the mould board and share, but when the conductor is not to be used the bars may be straight or made in conformity to the curve of the share and mould board. This device has been patented by Mr. J. Etzler, of Tyrone, Pa.



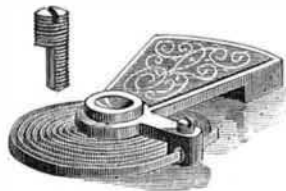
Bushing and Ferrule for Winding Shells.

This is an improvement in the hollow wooden shells used for winding long strips of calico, cotton cloth, or other fabric. The invention consists of a metal casting having a square opening or socket in the center for receiving the winding shaft or shank by which the shell is revolved. Between the socket and periphery of the casting there are curved slots leaving a ring connected with the socket by short arms. The socket forms the bushing of the shell, while the ring serves as a ferrule for preventing splitting. The casting is forced into the ends of the wood before the shell is turned; the sockets facilitate chucking the shell in the lathe. This improvement adds greatly to the strength and durability of the shell without materially increasing its cost. This invention has been patented by Mr. A. N. Ackerman, of Passaic, N. J.



Balance Spring Holder for Watches.

The engraving shows a novel device for securing the hair springs of watches to the hair spring stud. The hair spring stud or holder is of the usual form, provided at its outer end with a transverse slot or aperture, through which the end of the spring passes, and fitted with the screw pin by which the end of the spring is clamped. The screw is cut out for about half its length, and the face of the cut-out portion is made convex. By cutting out the screw in this way it forms an eccentric that may be turned so as to bear upon the spring. To clamp the spring the end is inserted through the aperture, and the screw is then turned to clamp or bind the end of the spring securely, and the spring may be disconnected at any time by giving a slight turn to the screw. This simple device obviates all danger of bending or breaking the hair spring in taking it up or lengthening it. Usually hair springs are secured by a pin, which is put in place by using a pair of pliers for forcing the pin in and out; in that case there is always danger of injuring the spring. This holder obviates this trouble, as it can be moved by a screwdriver, and it is not necessary to take it from the stud. The rounded surface of the screw by which the spring is clamped touches the entire width of the spring, holding it firmly and in its natural position, so that the springs cannot be set sidewise or become loose. The screw may be applied either horizontally or vertically, and is adapted to any style of hair spring stud in ordinary use. This useful invention has been patented by Messrs. Theodore Smith and Merritt P. McKoon, of Franklin, N. Y.



A Breath of Fire.

Dr. L. C. Woodman, of Paw Paw, Mich., contributes the following interesting though incredible observation: I have a singular phenomenon in the shape of a young man living here, that I have studied with much interest, and I am satisfied that his peculiar power demonstrates that electricity is the nerve force beyond dispute. His name is Wm. Underwood, aged 27 years, and his gift is that of generating fire through the medium of his breath, assisted by manipulations with his hands. He will take anybody's handkerchief, and hold it to his mouth, rub it vigorously with his hands while breathing on it, and immediately it bursts into flames and burns until consumed. He will strip, and rinse out his mouth thoroughly, wash his hands, and submit to the most rigid examination to preclude the possibility of any humbug, and then by his breath blown upon any paper or cloth, envelop it in flame. He will, when out gunning and without matches, desirous of a fire, lie down after collecting dry leaves, and by breathing on them start the fire and then coolly take off his wet stockings and dry them. It is impossible to persuade him to do it more than twice in a day, and the effort is attendant with the most extreme exhaustion. He will sink into a chair after doing it, and on one occasion, after he had a newspaper on fire as narrated, I placed my hand on his head and discovered his scalp to be violently twitching as if under intense excitement. He will do it any time, no matter where he is, under any circumstances, and I have repeatedly known of his sitting back from the dinner table, taking a swallow of water, and by blowing on his napkin, at once set it on fire. He is ignorant, and says that he first discovered his strange power by inhaling and exhaling on a perfumed handkerchief that suddenly burned while in his hands. It is certainly no humbug, but what is it? Does physiology give a like instance, and if so, where?—*Michigan Medical News.*

Insulating Materials.

The immense strides which have been made in electrical discovery, particularly in practical applications, have compelled electricians to seek for new and cheaper insulating materials than those already in use. Hitherto they have been limited to glass, porcelain, stoneware, gutta percha, India-rubber, and ebonite. Owing to the greatly increased demand, the price of the last three named has risen very much, and is likely to rise still more, and, while the quality has deteriorated, it is impossible for the existing sources to supply what is needed, not only for telegraph and telephone work, but for the immense field opening in electric light work. The public require, before everything, safety in the use of electricity, and there is a corresponding demand for a cheap insulating material, the supply of which shall be equal to the demand likely to arise.

The Ether Spray an Immediate Cure for Neuralgia.

Dr. McColgan extols the value of the ether or rhigolene spray for the instantaneous relief principally of facial neuralgia. He first had occasion to observe its good effects upon his own person, he having suffered greatly from facial neuralgia. Since curing himself, he has had occasion to test its efficacy in about twenty cases. The result was invariably a most gratifying success. In many instances a permanent cure was established. He attempts to explain its action by supposing a complete change to take place in the nutrition of the affected nerve in consequence of the intense cold acting as a revulsive.—*Southern Practitioner.*

THEATER FIRES.—FIREPROOF FITTINGS DEMANDED.

The recent burning of two theaters in this city within two days—the Park Theater and the Alhambra—renews attention to the dangerously combustible character of such places of public resort and the ever impending danger of public disaster so long as the present state of things is maintained.

Fortunately both fires occurred when the theaters were empty, or nearly so. A few workpeople were engaged in the Park Theater making ready for a performance to come off three or four hours later, and one of them, the stage carpenter, was cut off by the rapid spread of the fire. As the origin of the fire was not determined, it is impossible to say that a fire might not have arisen from the same source at any time; and from the brief interval between the discovery of the fire and the destruction of the building it is certain that a multitude of lives would have been lost had the fire broken out a little later, or any time during a performance.

Usually, when such preventable disasters occur they are followed by a general discussion of the means of preventing and controlling fires in such places. The simple burning of these two buildings, however (although it served to demonstrate the utter inadequacy, if not uselessness, of the customary interior arrangements and apparatus for extinguishing fires in theaters, owing to the almost instantaneous spread of the flames), seems to have aroused but little popular attention.

The only significant utterance called out appears to be that Mr. Esterbrook, Chief Inspector of Buildings, who describes our places of public resort as largely fire traps which will yet burn up their hundreds of persons, simply because the "rascally politicians" will not have them otherwise.

Soon after the Vienna Ring Theater disaster he sent to Vienna for the report prepared for Government use in making arrangements to prevent another such horror. This report embodied suggestions of the most eminent architects, engineers, and builders of Vienna. He had it translated, and then, with the co-operation of architects here, draughted a bill which was presented to the State Legislature last April, but was rejected. The proposed law provided, in addition to abundant exits and broad passageways, that a space of ten feet be left all around the theater buildings; that all doors must be left unlocked and open outward; a brick wall must separate the stage from the auditorium, the only opening in it to be the proscenium arch; all stair-cases to be inclosed in brick walls; all floors, partitions, and stairs to be of non-combustible material; one-quarter of the roof over the stage to be of skylights, which will fall open when a single hempen cord is cut; stand pipes of water, tanks, hose, etc., to be provided at different parts of the house.

This bill, Mr. Esterbrook said, was defeated because it was too good a law to suit the purposes of "petty ward politicians." Save this, there is "no reason why a theater should not be safe from fire beyond all question."

Mr. Esterbrook said further that he is going to press the same bill again this year. That some such measure should be, and ultimately will be carried through, is practically certain; for the public interest will not always be held subordinate to that of speculative politicians. And in anticipation of the time when fireproof theater construction will be made imperative our inventors may well be making preparations for meeting the demand for the new order of theater construction, fittings, and appliances. The scope for invention in this connection is wide, and not limited to the specific requirements of theaters.

Liabilities for Injury to Patients During Operation.

The decision of Judge McAdam, in a recent suit before the Marine Court of this city, brought by Thomas J. Kelly against the dentist Colton, to recover for injuries caused by allowing a piece of tooth, which was being extracted, to drop down the plaintiff's throat while he was under the influence of laughing-gas, is one full of importance, not only to dentists but to general surgeons as well. It is alleged that the piece of tooth slipped from the forceps, and for four weeks thereafter the plaintiff was troubled with a cough until he finally expectorated the piece. The court held that while a patient was under the influence of an anæsthetic which deprived him of the use of his faculties the operator was bound to exercise the highest professional skill and diligence to avoid every possible danger, and in this case it was the opinion of the court that the circumstances shown were sufficient to carry the case to the jury on the question of negligence.

The judgment appealed from was in favor of the plaintiff for \$500 damages, and this judgment was affirmed by the present decision.

Substitute for Cod-liver Oil.

Among the numerous substitutes for cod-liver oil which have from time to time been brought before the notice of the profession, dugong oil, which is an extract obtained from the dugong, an herbivorous cetacean inhabiting the warm seas of the coasts of Australia and the Eastern Archipelago, has met with a most favorable reception. Dugong oil is free from the unpleasant odor and taste which characterize cod-liver oil, and is much less liable to change in keeping. At ordinary temperatures it is opaque from the separation of its more crystalline constituents, but becomes clear and almost colorless when slightly warmed. The dose is the same as cod-liver oil.