the company agreed to be done by the latter parties in co-operation with the directors, the firm agreeing to pay as rent ten per cent of their net sales, the profits of the consolidated company to be shared in certain proportions, *Held*, that the manufacturing company are not responsible for the manufacture of try-squares complained of, made by the firm for its own use in the rented premises.

May a landlord be enjoined from permitting his tools and machinery to be used for the injury of a third person? *Quære.*

An improvement in try squares which produces a tool more convenient, with a larger capacity, and more accurate, by adding to such a tool a slot in one of the arms, is a patentable invention.

Whether a reissue is wholly valid or not, it may be valid to the extent that claims in the original and in the reissue are alike; and if those claims are infringed, an injunction may be granted.

The reissued patent of John Lovatt, May 30, 1876, being much broader than the original, declared void.

The right to have corrections made by reissue may be abandoned and lost by unreasonable delay.

A reissued patent which enlarges an original patent—*i. e.*, which makes the invention patented other and more inclusive than the original letters patent—is void as against intervening rights and the public as well.

The object of the law on the subject of patents is to advance the interest of the public by securing certain exclusive rights to patentees, and among those rights is that of changing, by a surrender or reissue, the language when the idea remains the same.

Reissued Letters Patent No. 8,590, granted February 18, 1879, to Charles T. Day, for an improvement in skates, construed and *Held* not to be anticipated by the invention patented June 22, 1869, by Alpheus S. Hunter.

Reissued Letters Patent No. 6,811, granted to John Parker, December 21, 1875, for an improvement in fly-traps, examined and held to be invalid. Reissued Letters Patent No. 6,493, granted to James M. Harper, June 22, 1875, for an improvement in fly-traps, construed and *Held* not to be infringed by the defendant's structure.

In the fly-trap whose construction is otherwise old it is not a patentable invention to strengthen the wire-cloth case by the use of upright and horizontal stays, nor to similarly strengthen the wire cone by annular and upright stays. These are suggestions which would occur to any skilled mechanic in constructing such chambers of wire-cloth, from the very nature of the material, and are mere matters of workmanship involving no invention.

There is no patentable invention in fastening the cone of a fly-trap to the base by slipping the horizontal annular stay of the former within that of the latter, so that they shall coincide, nor in nesting such cones for transportation.

The damages recovered in a suit for infringement are merely a satisfaction for prior use, and do not free the parties infringing from the operation of a patent.

The use of part of an invention covered by a patent may constitute an infringement, and a party so using an invention after injunction granted adjudged guilty of contempt.

Where skates containing an improvement on an earlier patent held by the same inventor were in use or were offered for sale by the same inventor, whether actually sold or not, more than two years before his application for his second or subordinate patent, the latter is void.

The decision of the Patent Office upon an interference proceeding is sufficient to entitle the successful party, as against the defeated party or his privies, to a preliminary injunction upon the question of priority of invention.

The defeated party may, in another action, raise the question of want of novelty in the invention; yet if he had knowledge of the state of the art at the time he made his application, the want of novelty must be made clearly apparent.

Letters Patent No. 259,597, granted to Stephen N. Smith, June 13, 1882, for an improvement in machines for making lacing-hooks for shoes, construed and *Held* not to be anticipated by Letters Patent No. 102,195, granted April 19, 1870, to S. W. Young, or by Reissued Letters Patent No. 9,837, to Lauriston Towne, August 9, 1881.

Letters Patent No. 177,334, granted to Abner B. Hutchins, May 16, 1876, for an improvement in hydrocarbon-stoves, examined. The court declined to consider whether the invention was sufficiently described in a prior Canadian patent, or whether the invention had been in public use for more than two years prior to filing the application, it appearing that the defendants' structure did not infringe the claim of the patent.

Disclaimers, qualifications, and limitations imposed upon a patentee by the Patent Office are forever binding upon him, if he chooses to accept a patent containing them, and they forbid any subsequent enlargement, whether by reissue or by a broad construction of claims thus intended to be limited.

If an applicant considers a case important enough, he may refuse to take a limited patent, and being then rejected, may apply to the Supreme Court of the District of Columbia, and if still dissatisfied, he has his remedy in equity by section 4,515 Revised Statutes. Here remedies are ample, and they are exclusive under the decisions.

Construing the patent according to the requirements of the Office acquiesced in by the patentee, *Held* that the defendant did not infringe, because his frame has not the peculiar construction which the Examiner declared was the only ground for issuing the patent.

Correspondence.

The Statue of Liberty.

To the Editor of the Scientific American:

In your last number is a plan that must meet the approval of all concerned to raise the statue of Liberty, by building it on its great plinth stone; and by powerful screws raising it by degrees to its desired height. But the almost brick-work like pedestal seems out of proportion in its plainness to the statue.

It seems to me that a column, not unlike Pompey's pillar, in Egypt, or a minaret tower, might be designed, that would be far more beautiful, or even some square Italian tower. If the design, in the poverty of the people of the United States, is to build this rude, unseemly pedestal, to be inclosed hereafter in cut and ornamental stone, then there is no objection to it; for it will remind our citizens of the great want of money, that built up so many millionaires. Of course other means of giving the statue stability might be adopted than the central metallic tube, as the statue is evidently designed to be fitted with braced work of metal, and then filled with masonry, with a winding stone staircase to its top. But the mode of its elevation by the plan suggested, it seems to me, is eminently practical.

S. J. PARKER.

Ithaca, N. Y., May 25, 1883.

"Hydrophobia."

To the Editor of the Scientific American:

Working as a boy in the office of the *American Farmer*, Baltimore, Md., I first became familiar with your paper a quarter of a century ago, and it has afforded me boundless pleasure and profit since. In your issue of March 31, article entitled "Treatment for Snake Bites and Hydrophobia," credited to the *Lancet*, I find the following, and if permitted expect to show another illustration of the old adage, "There is no new thing under the sun:" "At a recent meeting of the Lower Rhenish Philosophical and Medical Association, held at Bonn, Professor Binz described an interesting series of experiments carried on under his direction, with a view of testing various antidotes to the poison of serpents. He remarked that numerous specifics are heard of among the natives of India, which as a rule were inoperative. His opinion was that when a poisonous snake has bitten a person in the usual manner, spirits can only serve to alleviate or prevent the spasms of suffocation which are induced by the action of the poison on the respiratory nerves. Atropine and other specifics against imminent results of an analogous character caused by narcotic influences, have been found ineffective against this deadly virus. The most favorable tests made were with *chloride of lime*, a filtered solution of which was injected into the place where the fatal virus had previously been introduced. In seventeen trials made in succession, the poisoned animal survived without the slightest disturbance of its healthy condition. In five succeeding experiments, when a relatively insufficient dose was administered, or when animals suffering from disease *were operated upon*, the chloride of lime served only to retard the fatal effects of the poison. Binz suggested that the adoption of this treatment in cases of the bites of dogs suffering from rabies might possibly be attended with favorable results, inasmuch as chloride of lime has been shown to have much greater power than any of the caustic substances now usually applied to dog bites, which have been proved to be scarcely if at all effective against the consequences of snake bites."

Chloride of sodium, common table salt, chemically a combination of *chlorine* and sodium, universally used as a condiment and antiseptic, and highly recommended in malarial fevers, has recently come to the front as a remedy for hydrophobia; and the letter upon the subject in the April issue of the *Druggists Circular*, by Dr. Dix, of Shelbyville, Ky., merits the attention of the medical profession as well as laymen.

I have in possession some curious instances of the use of chloride of sodium as an internal remedy for hydrophobia, in Maryland, extending back full half a century. My collection of cases where it has been given internally, added to Dr. Dix's experiments and experience applied to the wound externally, would justify further experiment by students of science, particularly, since in addition to the "chlorine" afforded as a decomposer of the animal virus or poison in the circulation are the well known therapeutic effects of salt entering rapidly into the blood and thrown off by the kidneys, acting upon the bowels, tonic and stimulating to the general system. In teaspoonful doses it is widely used as a household remedy to lessen the rapidity of the circulation and stop the flow of blood. Dr. Dix recommends opium for this purpose; the small amount necessary to produce narcotic effects would make its general use, however good, to some extent dangerous, given under circumstances of intense excitement.

Prof. Binz's suggestion that chloride of lime would be a valuable remedy for the cure of hydrophobia, *applied to the wound*, is not quite "as old as the hills," but old nevertheless. Why it did not occur to him to use it hypodermically and by mouth, and to others also, I cannot understand. It is stimulant and astringent, in the first case helping to raise the vital powers, and in the second case lessening the rapidity of the circulation, and retarding the dissemination of the poison through the economy. If chloride of lime applied to the wound will decompose the veins with which it comes in contact, it is reasonable to assume, that some of it will be absorbed by the vessels and decompose the virus in the circulation. If this is a fair assumption, it is plausible, practicable, and possible to meet the poison within the system and destroy it. To show the antiquity of the remedy, I append the extracts taken from a letter of Dr. Jos. Ennals Muse, of Cambridge, Md., written for the *Cambridge Chronicle*, February 18, 1830:

"With this view and these sentiments I make the communication of a '*fact*' which should be cut out and pasted in every man's parlor. The fact I allude to has been recently ascertained by a French chemist and surgeon, M. Coster, and published in the *American Journal of Science*, conducted by Professor Silliman. This important fact, '*that chlorine has the power to decompose and destroy the deadly poison of the saliva of the mad dog!*' has grown out of chemical philosophy and chemical research, and is of more value than vaccination, or any other discovery which the annals of medicine have recorded; because it furnishes man with a certain prophylactic against the most horrible disaster which is incident to his existence.

"Of the truth of this discovery and the accuracy of the experiments on which the statement is predicated, there can be no doubt, 'it is affirmed,' by the most highly valued medical authority; and M. Gay Lussac has since reported a case of the successful application of the same substance to poison by prussic acid, one of the most active and virulent known in nature; and it will probably be extended to many others. It is astonishing that this substance called, 'chlorine" under the new nomenclature, should have remained so long comparatively at rest. It was discovered by Schle in 1774, and was used many years ago by England, and I believe France, to purify their ships, jails, and hospitals, under the name of 'oxy-muriatic gas.' The principle, too, on which it operated was *then* well understood; and the theory now differs in the present case, chiefly in *terms*. Hydrogen gas is known to constitute, in combination with sulphur, phosphorus, and ammonia, the intolerable smells from putrefying substances; deprived of hydrogen this odor disappears; the analogy was extended to animal effluria; the conclusion was drawn that the abstraction of the hydrogen by means of its affinity for the excess of oxygen in the oxy-muriatic gas would destroy the virus by its decomposition; the result has been satisfactory. The Chloridians view this same oxy-muriatic gas as an elementary substance, and call it 'chlorine' from its green color; this 'chlorine' then performs the part of the oxygen of the 'French theory,' and combining with the hydrogen of the effluvia effects its decomposition, and consequent destruction, in the same manner.

"As many poisons (most probably all animal *poisons*) are known to contain hydrogen, it is a matter of astonishment that analogical induction had not long ago advanced the learned inquiries to the present important discovery, 'that poisons, animal and mineral, constituted in part of hydrogen, as far as experiment has gone, are decomposed and rendered innocent by oxy-muriatic gas, or chlorine, as the respected theorists may please to have it."

"This article (chlorine) is cheap, and should, in conjunction with the mode of using it, be in the possession of every family, because delay will render it abortive. It is prepared and applied in the following manner: Make a strong wash, by dissolving two tablespoonfuls of chloruret of lime in half a pint of water, and instantly and repeatedly bathe the part bitten. The poison will in this way be decomposed. It has proved successful when applied within six hours after the animal has been bitten.

"It may be now proper to say that I have made this communication, because the fact stated is one of recent discovery: and I have made it the more full, connecting with it the *rationale*, that it may obtain the greater confidence with those who, though not conversant with chemical science, yet can appreciate the force of reason in any science; and I have affixed my name, because an anonymous notice of a fact does not necessarily bear with it the verity or responsibility of a name.

"I have the honor to be, sir, Yours, etc.,

"JOSEPH E. MUSE."

Hoping this letter will serve to invite the attention of scientific men to experimental investigations relating to the *internal use* of chloride of sodium and chloride of lime, in addition to the already highly extolled external use of these substances, and that they will prove satisfactory substitutes for the present barbarous and unscientific knife and actual cautery—if the poison is on or near the surface of the wound, these substances will destroy it; if it is absorbed, they *may* extract it or neutralize it; the knife and cautery can do no more on the surface, and nothing but injury if the poison is absorbed.

J. M. WORTHINGTON, M.D.

109 Church Street, Annapolis, Md.

Explosion of a Slag Ball.

The *Ironmonger* relates an account of an accident of an alarming character which recently occurred at South Bank, Middlesborough. Near the railway station, says our London contemporary, is the slag heap of the Cargo Fleet Iron-works. A large slag ball had been taken from one of the furnaces and tipped over the slag heap, when it exploded. Three large pieces of the molten slag fell through the roof of the railway station on to the platform, and several passengers awaiting the train to Middlesborough narrowly escaped being injured.