HYDROPHOBIA—PRACTICAL SUGGESTIONS FOR ITS PREVENTION AND CURE.

At a recent meeting of the New York Neurological Society, which was largely attended by prominent physicians and surgeons of this city, Dr. Hammond made an address in which many interesting facts and experiences pertaining to the dreadful malady of hydrophobia were presented. He also produced diagrams of highly magnified sections of the brain, spinal cord, and pneumogastric and other nerves, of McCormick, the expressman, taken soon after his death here from this disease. All of the parts exhibited showed a deficiency of cell structure, and it was evident that a striking change from the normal condition had taken place. The gray matter had passed into a state of fatty degeneration, mainly in the form of oil globules. This discovery was considered important, as indicating the particular members of the system that were affected and the changes therein, congestion of some of the parts being especially shown as a primary condition. The knowledge gained might assist the physician in future treatment of the disease.

Among preventives, Dr. Hammond thinks that the cutting out of the wounded parts is the best, and that it will be effectual if done at any time prior to the development of the symptoms of the disease, although the sooner it is done after the bite the better. He had performed this operation of excision some thirty or forty times, upon persons supposed to have been bitten by mad dogs, and in no case has hydrophobia ensued.

"In regard to the treatment," Dr. Hammond observes, "there is not much to say; but I have one or two ideas about it which I would like to mention to the Society. I am inclined to think that the most effectual method of treatment would be the persistent application of the primary galvanic current. I would put one pole to the patient's head and the other to his foot, and make the current flow continuously all the time while the disease lasted. In one case reported by Mr. Schivadi, he by that means maintained the life of the patient for seven days, a very long time for the disease to last, and then the patient died without any hydrophobic symptoms, seeming to die purely from exhaustion. Recollect that means has not been used successfully in but two cases. Schivadi used it in some former case, but there was such a neglect about the application of it that it was not effectually carried out, and so that patient died with hydrophobia fully developed. There are dozens of ways in which galvanism can be applied; but which one will be more effectual than others or what the effect will be, we cannot definitely say until we have

FILING THE TEETH OF THE DOG.

more experience upon the subject. There is some ground, likewise, for thinking that, in the application of the primary galvanic current in that manner, we have one of the most if not the most effectual means of treating disease known to us. And then, in addition, I would apply ice to the spinal cord and to the whole length of the spine, and keep the patient immersed in it, you may say, the whole time. I have used ice quite extensively in the treatment of tetanus four times in this city. In one case in particular, in which I was in consultation with Dr. Lewis Smith, the ice was kept at the spinal cord during the whole course of the disease, and the patient got well. Another case, induced by a wound, likewise in this city, in the person of an eminent musician, I treated in the same way—with ice—and he recovered. And I am inclined to think that in ice we have another very effectual means of treating hydrophobia, which I would feel disposed to rely upon; but I should say galvanism more than anything else. As regards the administration of internal remedies, I have nothing to say. Those cases in which they are reported as being successfully used, rely upon it are not authentic cases of hydrophobia."

Dr. Hammond then presented resolutions, which were adopted by the Society, against the muzzling of dogs, in favor of killing all vagrant dogs, and also the following:

Resolved: That in the opinion of this Society the most effectual means of preventing the origination and spread of hydrophobia is by the imposition of a tax upon all dogs kept for use or pleasure; requiring the canine teeth or fangs and the incisor teeth to be blunted, as proposed and effected by Bourrel, and the destruction, under proper regulations and by duly authorized persons, of all dogs not licensed, or which may be found with the teeth unblunted.

In the absence of any legal enactment, the New York Neurological Society recommends to all owners of dogs to have the teeth of the animals blunted in the following manner, as detailed by Fleming in his "Treatise on Rabies and Hydrophobia": "The operation is a simple one. For a large dog, two assistants are necessary; for a small animal, only one. The creature is seated on a table, a gag is fixed in the mouth between the molar teeth by a band passed behind the neck; another band or piece of wide tape fastened around the muzzle at the back of the gag prevents any movement of the jaws. To blunt the incisor teeth a file is used, and to expedite the operation the longer canine teeth or fangs are shortened by sharp nippers and then smoothly rounded by the file. The gag, of course, must be proportioned in thickness and length to the size of the animal."

Dr. Hammond then placed a dog in view of the audience on which the operation of blunting the teeth had been performed. The Doctor said: "You will see how impossible it is for him to bite so as to break the skin even—it is utterly out of the question. This is the manner in which it is done: Place this stick between the molar teeth of the dog, and keep the stick in position by a cord attached to both ends of it. Then while the stick is in his mouth, and a cord placed so as to prevent his opening his mouth any wider, this operation could be done within eight minutes. When the operation of filing is performed he cannot bite, and he is not injured in the slightest degree for any purposes. He can do just as well as ever. He does not use his canine teeth to tear his food, and there is no reason why the operation should not be performed upon him, and it makes him altogether a more useful portion of society. We have performed various operations on animals to make them subservient to our uses, and there is no reason why this operation should not be made obligatory upon all owners of dogs."

THERE are 5,000 miles of telegraph line in Mexico, according to the latest official returns. Of the total, the government owns about half, and the balance is in course of construction or is controlled by States and private companies.

A CORRESPONDENT, Mr. D. B. Snow, of South Lancaster, Mass., reports the appearance of a perfect lunar rainbow at that place on the evening of June 29. Naturally the colors were not so vivid as those of a solar rainbow, but the arc was complete.

THE ST. LOUIS UNDERGROUND RAILWAY TUNNEL is 4,800 feet in length, and extends from the great bridge to Poplar street.

A LARGE portion of the rails on the Great Western Railway, England, were lately reduced from the broad to the narrow gage, of 4 feet 8½ inches. Two thousand men did it in eighteen hours.

M. F. DE CANDOLLES has been elected Associate Member of the French Academy of Sciences in place of Professor Agassiz. M. Candolles is a Swiss naturalist of considerable reputation.

THERE is to be an International Geographical Congress held in Paris in the spring of 1875. A committee is now at work, arranging details and classifying the various subjects to be considered.

THE Chicago *Railway Review* appears in a new dress, enlarged in size, and full of interesting railway information. It is one of the best periodicals in the country.

DECISIONS OF THE COURTS.

United States Circuit Court---Southern District of New York.

PATENT WATCHMAN'S TIME DETECTOR.—JACOB E. BUERK *vs.* WILLIAM IMHAUSER *et al.*

WOODRUFF, *Circuit Judge:*

I have re-examined the decision heretofore made by me in Buerk *vs.* Valentine (9 Blatchf., 479), so far as it bears upon the contest in this suit. In that case, the patents and patented devices, including the patent for the infringement of which this suit is brought, are fully described. The additional evidence here introduced does not alter my conviction that the invention now in question, and secured to the complainant by his patent of June 5, 1865, was not anticipated by any of the devices to which the evidence relates; nor by John Buerk, upon whose invention that of the complainant was an improvement.

Is the defendants' detector an infringement? I think it is. The only difference between it and the complainant's detectoris that instead of forcing points upward to perforate, the defendants force the paper downward upon and to receive an impression from stationary projections from the surface below. Both indent the dial upward; one makes a perforation, the other an upward indentation. I do not think an inventor can be robbed of the fruits of his invention by such a variation, when the whole structure of his machine is in other respects the same.

Without deeming it necessary to discuss the subject more minutely or fully, my conclusion is that the complainant's patent is valid, and that the defendants infringe it.

Let a decree be entered for the complainant awarding an injunction, directing an account, etc.

[*J. Van Santvoord*, for complainant.
Keller & Blake, for defendants.]

PATENT SUBMARINE DRILLING APPARATUS.—CAMMEYER AND SAMUEL LEWIS *vs.* NEWTON *et al.*

[In equity.—Before Blatchford, Judge.—Decided June 10, 1874.]

Blatchford, *Judge:*

This suit is brought on letters patent granted July 28, 1868, to William H. Cammeyer, as assignee of Samuel Lewis, as inventor, for an "Improved Portable and Adjustable Still Water Dam." The specification states that the invention is an "improved portable and adjustable dam for the purpose of producing still water in which to operate for the blasting and removal of obstructions in rivers and other water courses, etc."

The answer of General Newton denies the infringement alleged, and avers that, during the year 1859, he invented an apparatus for use as a caisson, coffer dam, and diving bell, in excavating and taking out rock in the harbor of New York; that it was constructed by and at the expense of the United States, and has since been used exclusively by the United States in the prosecution of the work undertaken by the United States, of improving the harbor of New York; that General Newton, being an officer of the United States and a lieutenant colonel of engineers in the army of the United States, has been heretofore assigned to the duty of directing the said improvement of the harbor of New York, and, in pursuance of his aforesaid duty, and acting for the United States, has used the aforesaid apparatus; that the other defendants, during all the time they, or either of them, have had any connection with the use of the said apparatus, have been employed and paid by the United States, and have acted in connection therewith solely as employees and agents of the United States; that neither he nor any of the defendants have derived any profit or emolument from the construction or use of said apparatus; that in the year 1867, in Boston harbor, Massachusetts, one George W. Townsend put in operation a method of drilling and blasting rock under water in a rapid tide way, using therefor a drilling platform, supported by anchors and adjustable legs, combined with a boat and a system of windlasses, anchors, and chains, together with suitable machinery, by means of which a system of drills might be operated, substantially like the apparatus claimed by the plaintiffs; that the apparatus and dam claimed to have been invented by Lewis was not in fact the invention of Lewis, but the same had been invented and described by the defendant Newton prior to its invention by Lewis; that such invention and a description thereof were printed and published in a letter from the Secretary of War of the United States to the House of Representatives in the Congress of the United States, dated Washington, February 11, 1867, containing a report made by the defendant Newton, which gave a full and complete description of said machine so invented by the defendant Newton, together with the mode of constructing and using the same, which said letter and report were, on the 14th of February, 1867, ordered by said House of Representatives to be printed, and were printed and published at Washington, and are known as Executive Document No. 90, House of Representatives, second session Thirty-ninth Congress; that the said Lewis unjustly and surreptitiously obtained a patent for the said apparatus, which was in fact invented by said Newton, who was using reasonable diligence in adapting and perfecting the same.

Lewis testifies that, having read General Newton's reports from time to time, particularly the one of 1867, setting forth the difficulties of accomplishing anything in submarine drilling in strong currents, he turned his attention to inventing a machine for that purpose. The patent sued on was taken out July 28, 1868. It discards the idea of a rigid platform supported from the rock to hold the drill tubes, but adopts the idea of a dam in sections suspended permanently from a float, and attaches the drill tubes to the dam. It is in direct antagonism to the ideas developed by General Newton. He proposed to work from the rock in drilling, so as to work as on dry land. Lewis proposed to work from a float in drilling. Newton proposed to use a dam merely to protect divers in removing blasted pieces of rock, and for this purpose a dam in flexible sections, deep enough to lie on the bottom, could well be suspended permanently from a float. Lewis proposed to suspend a sectional dam from a float, and affix the drill tubes to the dam, and subject the drilling to the contingencies of the movements of the float.

The allegations of the bill, so far as they assert that General Newton proceeded in constructing his apparatus in intentional imitation of Lewis', are not sustained either as to the intention or imitation. General Newton appears to have considered Lewis' plan, and to have deliberately rejected it, and to have proceeded on one directly opposite. The latter has proved successful. General Newton, in all he has done, that is complained of in this suit, has acted as an officer of the Government, in its service, and for its interests, judiciously, carefully, and without failure. He has not used Lewis' invention. He has done nothing for his own profit. There is nothing developed in the evidence to warrant the suggestions contained in one of the arguments submitted on the part of one of the plaintiffs that General Newton put forth a snare to entrap the unwary by inviting Lewis to invent an apparatus; that he announced to Lewis his intention of taking and using any patented invention which it might suit his purpose to use in the work; that he did not intend to waste any sentimentality on nice points in relation to the rights of patentees, so long as his own purposes were served, or to allow any scruples to interfere with his taking other people's property for the accomplishment of his own ends; that the infringement complained of was a matter of deliberate intention from the beginning; that General Newton has been robbing a poor man; and that the court has never had occasion to deal with a more unscrupulous, wanton, and cruel infringement. Some ideas are found in Lewis' patent, which, if worked out in such a manner as to produce a successful practical result, are valuable—a current breaker including the working drills, and drill guides near the rock affixed to the current breaker. But these ideas are so hampered in construction as to make the drill guides dependent on the boat. General Newton took up, as any inventor had a right to do, the complete invention of Lewis, and, on examining it, found that it proceeded on an entirely wrong principle, if designed to accomplish the result of having a dam to act at the same time as a current breaker and a fixed support for drill guides near the rock, and he organized it on a new principle. He took up the apparatus where Lewis left it, and discarded Lewis' arrangement. These views are sustained by the experts for the defendants, General Tower and Professor Peck, and by the other evidence in the case.

A decree will be entered, dismissing the bill with costs.

[*George Gifford* and *Thomas P. Hove*, for the plaintiffs.
Charles M. Keller and *Henry E. Davies*, for the defendants.]

Recent American and Foreign Patents.

Medical Compound for the Cure of Coughs, Colds, etc.

Henry M. Hoyt, Knight's Landing, Cal.—This invention consists in a compound made of ingredients whose properties are peculiarly adapted to reach the seat of disease in throat and lung complaints. In cases of colds that had settled on the lungs, this compound has given relief in a few days, loosening the matter and, in cases of consumption, the tubercles from the lungs. It is stimulating and healing, enabling matter to be thrown off without severe fits of coughing or unusual exertion. Moreover, it is entirely without opium or other stupefying ingredients, which merely deaden the sensations and temporarily relieve the patient.

Improved Railway Car.

John Coyne, Baltimore, Md.—This invention relates to modes of constructing the frames of railway cars that are to be rubber-covered on the inside and outside, and consists in sheets of metal jointed together and re-inforced at the bottom.

Improved Velocipede.

Moriz Nowak, Jeffersonville, N. Y.—This invention relates to improvements in velocipedes which are propelled by the action of the occupants, and it consists of a carriage body or frame placed on wheels, and driven by means of a pivoted foot board or treadle, which communicates motion by a fly wheel, belts, and pulleys to the hind axle, while the front wheels serve for steering the vehicle. Suitable devices for retarding and arresting the motion of the vehicle are applied in connection with the same.

Improved Revolving Horse Hay Rake.

Clarence E. Peckham, Columbia Cross Roads, Pa.—Levers are connected by a cross bar, and to a platform is attached a loop to receive the operator's foot, so that he can raise the said platform by lifting with one foot while he presses against the cross bar with the other. By this construction, by raising the platform above a horizontal position, bars will be pressed down upon the rear ends of the pins, so as to raise the points of the teeth; and by pressing the platform below a horizontal position, the bars will be pressed down upon the forward ends of the pins, and the bars will be raised from the rear ends of said pins, causing the forward ends of the rake teeth to catch upon the ground, revolving the rake and discharging the collected hay.