### 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 con sidered 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 af ter the bite the better. He had performed this operation of excision some thirty or fer:y times, upon persons supposed to have been bitten by mad dcgs, 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. Schi vadi, 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 ue. 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, like wise in this city, in the person of an eminent musician, I eated in the same way—with ice—and he recovered. And I am inclined to think that in ice we have another very effec tual means of treating hydrophobia, which I would feel dis posed 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 blanted in the following man-

ner, as detailed by Fleming in his "Treatise on Rabies and Hydrophobia": "The operation is a simple one. For a large dog, twe 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 s 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

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 81 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 Swis naturalist of considerable

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, en larged in size, and full of interesting railway information. It is one of the best periodicals in the country.

# HOW SHALL I INTRODUCE MY INVENTION?

This inquiry comes to us from all over the land. Our answer is: Adopt such means as every good business man uses in selling his merchandise or in establishing any business. Make your invention known, and if it possesses any merit, somebody will want it. Advertise what you have for sale in such papers as circulate among the largest class of persons likely to be interested in the article. Sendillustrated circulars describing the merits of the machine or implement to manufacturers and dealers in the special article, all over the country. The names and addresses of persons in different trades may be obtained from State directories er commercial registers. If the invention is meritorious, and if with its utility it possesses novelty and is attractive to the eye, so much the more likely it is to find a purchaser. Inventors, patentees, and constructors of new and useful machines, implements, and contrivances of novelty can have their inventions illustrated and described in the columns of the Scientific Ameri-CAN. Oivil and mechanical engineeringenterprises, such as bridges, docks, foundries, rolling mills, architecture, and new industrial enterprises of all kinds possessing interest can find a place in these columns. The publishers are prepared to execute illustrations, in the best style of the engray ing art, for this paper only. They may be copied from good photographs or well executed drawings, and artists will be sent to any part of the country to make the necessary sketches. The furnishing of photographs drawings, or models is the least expensive, and we recommend that course as preferable. The examination of either enables us to determine if it is a subject we would like to publish, and to state the cost of engraving in advance of its execution, so that parties may decline the conditions without incurring much expense. The advantage to manufacturers, patentees, and contractors of having their machines, inventions, or engineering works illustrated in a paper of such large circulation as the SCIENTIFIC AMERICAN is ohvious. Every issue now exceeds 42,000 and will soon reach 50,000, and the extent of its circulation is limited by no boundary. There is not a country or a large city on the face of the globe where the paper does not circulate. We have the best authority for stating that some of the largest orders for machinery and patented articles from abroad have come to our manufacturers through the medium of the SCIENTIFIC AMERICAN, the parties ordering having seen the article illustrated or advertised in these columns. Address

MUNN & CO., 37 Park Row, N. Y. DECISIONS OF THE COURTS

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

PATENT WATCHMAN'S TIME DETECTOR .- JACOB E. BUEBE ES. WILLIAM WOODRUFF, Circuit Judge:

WOODRUFF, Circuit Judge:

I have re-examined the decision beretofore made by me in Buerk vs.
Valentine (9 Blatcht. 479), so far as it bears upon the contest in this aut. In that case, the patents and patented devices, including the patent for the infriogement of which this suit is brough; are fully described. The additional evidence here introduced does not alrer my conviction that the invention now in question, and secured to the complainant by his batent of June 5, 1885, 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 insteadof 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 in deat the d'al upward; one makes a perforation, the other an upward indentation. I do not think an inventor can be nothed 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 complainant awarding an injunction, directing an account, etc.

cting an account. etc.

Van Santvoord, for complainant.
eller & Blake, for defendants.

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

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

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

Blatchford, Judge:

This suit is brought on letters patent granted July 23, 1868, to William This suit is brought on letters patent granted July 23, 1868, to William This suit is brought on letters patent granted July 23, 1868, to William Charles and Adjustable Still Waver Than." The socchestion states that the investion is an "improved portable and adjustable dam for the purpose of producing still water Jin which to operate for the blating and removal of operation is an "improved portable and adjustable dam for the purpose of producing still water Jin which to operate for the blating and removal of the state o

# Recent American and foreign Latents.

Medical Compound for the Cure of Coughs, Colds, etc. I. Hoyt, Knight's Landing, Cal.—This invention consists in a compound made of ingredients whose properties are peculiarly adapted to each 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 lays, 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. More er, it is entirely without onlym or other stunefying ingredient 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 rallway 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 operaor'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 nown 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 dischargng the collected hay.