

Dr. Roux's wonder cure. The 24 per cent represents the saving of the lives of 120 children in six months in one institution. The gain would have been more considerable but for the deplorable hygienic conditions of the Hopital des Enfants Malades. Many of the deaths, too, were a result of further complications, such as heart disease and broncho-pneumonia, which made the work of the physician very difficult. Generally speaking a single injection is sufficient, and Dr. Roux

the shell of the boiler, as shown in Fig. 6, the outer end of the bushing being engaged by a general steam distributing box, from which the steam is distributed by pipes to the various parts of the locomotive. In case of an accident carrying off this box from its support on the shell of the boiler, or any sudden shock to the box, the valve will be automatically seated, the steam being in every case shut off. For the whistle, for the safety valve in the top of the dome, and for the in-

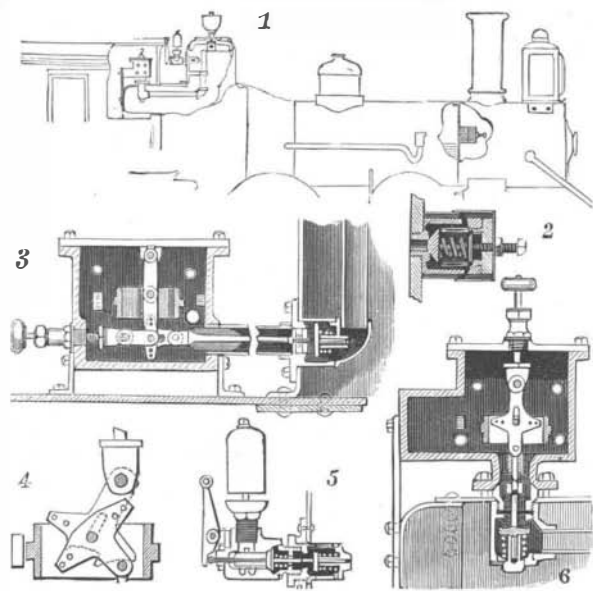


THE NEW CURE FOR DIPHTHERIA—DRAWING THE SERUM FROM THE HORSE.

has never given more than two. The dose consists of two-fifths of amount of serum injected into the side by one puncture. The temperature then decreases, which is an excellent beginning. The leather-like membrane which is suffocating the little sufferer ceases, within twenty-four hours, to increase, and after thirty-six hours it comes away altogether, and the diphtheritic bacilli disappear. The serum also has a marvelous effect on the appearance of the patient. The dull and leaden complexion, with its accompanying piteous cry, gives place to a healthy skin, and the patient becomes cheerful, if not gay.

AN IMPROVED LOCOMOTIVE BOILER.

To prevent the escape of steam from broken pipes, valves, etc., in case of accident to the locomotive, thereby doing away with the danger from scalding, is the object of this improvement, which has been patented by Mr. G. A. Akerlind, Erie Hotel, Dunkirk, N. Y. The invention consists principally of a spring-pressed valve normally held open, and adapted to close automatically in case of a shock to the locomotive, or in case the steam conveying pipe of the boiler is broken off, there being also an auxiliary safety valve in a sheltered place on the boiler, set to a higher pressure than the ordinary safety valve. Fig. 1 is a side view, showing the improvements applied upon a locomotive, Fig. 2 showing the auxiliary safety valve in the smoke arch, and Fig. 3 being a modified form of the improvement as arranged for the general steam distributing box. Fig. 4 is a side elevation of the weight for holding the valve and parts in position after a shock to the locomotive, and Fig. 5 is a sectional plan view of the



AKERLIND'S LOCOMOTIVE BOILER.

link connection for the weight, Fig. 6 showing in side elevation the application of the improvement on the steam distributing box for the injectors, air pump, blower pipe, steam heating system, lubricators, etc. The steam supply pipe from the dome leads to a valve connected with a bushing fitted into an opening in

jector check valve, similar automatically working check valves are provided. The inventor has lately received a prize as a successful competitor for a design for a consolidation engine to which this system was applied.

Regulation of Mineral Water Traffic.

The Academie de Medecine, of Paris, as the result of a close investigation of the trade in the so-called "natural" mineral waters of France, has arrived at the following conclusions, which are put in the form of recommendations to the legislative bodies:

1. That the sale of natural waters, impregnated with supplementary gases, should not be allowed.
2. Every application for permit to carry on the business of the sale of natural mineral waters should be accompanied by certificates, made before the proper authorities, that the waters handled or to be handled, by the applicant, have not been so prepared (i. e., by supplementary carbonification), and by a further certificate on the part of the owner of the spring, or of the source of the water, that he has not had recourse to supplementary gasification.
3. All reservoirs used for mineral water should be made air-tight, and should be emptied at least once in every twenty-four hours; they should be so constructed that the water of the spring flows directly into them; and, further, all bottles and containers should be thoroughly sterilized, and all impurities of every description should be removed before they are offered for sale.
4. These regulations should be at once imposed and all proprietors of springs of mineral waters should be forced to put them in practice within three months from date.

In France the recommendations of the Academie carry almost the weight of an order, and there is but little doubt but that the above regulations will soon be in force, so far as commercial waters for home consumption are concerned. If they are made to apply to all waters, those for export as well as those for domestic use, there will be a fearful falling off in exports, as it is well known that every single bottle of foreign, so-called "natural" carbonated waters—not merely those of France, but those of Germany, Austria and other countries—that goes abroad, goes charged with supplementary gas. Not merely this, but nearly every one of them is doctored otherwise to an extent that should remove them entirely from the category of natural waters.

Every one who has given the matter any attention knows that the mineral contents of nearly every natural spring vary with the seasons, becoming more concentrated in long dry spells and correspondingly weakened by rainy periods. In order to make the yield uniform the proprietors are forced to add water from other sources in the first instance, and to supplement the natural salts by the addition of artificially prepared chemicals in the second. The gasification is nearly all supplementary.

From "doctoring" the true waters of the springs to manufacturing the product outright is but a slight step, and hence we find some of the great mineral

water companies annually exporting to America, alone, millions of bottles of water in excess of the output of their springs. By a strange ruling of our customs officials, these manufactured mineral waters have been allowed for years past to come into this country as "natural waters," and thus not merely to enter into competition with our domestic products, natural and manufactured, but to "hold the age" on the latter as "the product of nature's laboratory," a fetch of great power among the unthinking multitude.

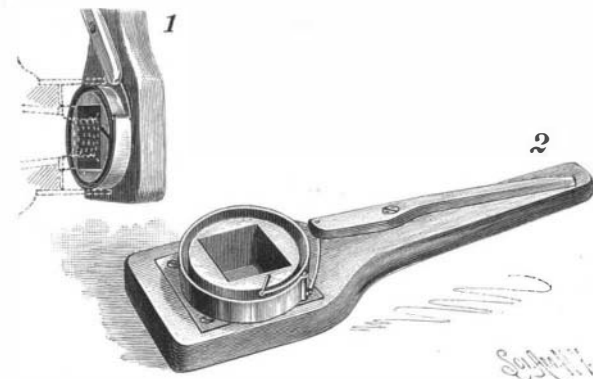
The steps suggested by the Academie, by showing the French people what poor stuff their natural waters really are, may have the effect of waking other governments up, and thus lead to legislation in this direction. If so, nothing but good can come of it.—National Druggist.

Annual Convention of the American Institute of Architects.

The twenty-eighth annual convention was held in this city, October 15, 1894, in the Fine Arts building; 105 members being present—a larger number than usual. President D. H. Burnham of Chicago delivered an interesting address, in which he deprecated the practice of showing designs to customers without payment. Other interesting papers were read and discussed. Secretary Stone read the annual report of the Board of Directors, from which it appears there is a membership of 475 fellows. There are also 26 chapters, chartered by the Institute, having an aggregate of 600 members, of which about 500 are practicing architects, and from these members the fellows are chiefly selected. The New York Chapter has the largest membership, namely 86, of which 60 are practicing members, the remainder honorary and junior. Illinois has 82 members, of which 80 are practicing. Philadelphia 55, of which 31 are practicing. The other chapters range from 8 to 20 members. The next convention meets at St. Louis. Daniel H. Burnham, of Chicago, was re-elected president; William S. Eames, St. Louis, secretary.

A CARRIAGE WRENCH.

The illustration shows a wrench more specially designed for conveniently removing the nuts on the axles of vehicles. The improvement has been patented by Mr. Julius L. Stambaugh, of Standart, Texas. Fig. 1 shows the wrench applied to the nut in the wheel hub and Fig. 2 is a perspective view, with the clamping



STAMBAUGH'S CARRIAGE WRENCH.

spring closed, ready to apply. The device comprises a cap adapted to engage the nut, and a spring band encircling the cap has one end secured to the body adjacent to the cap, while the outer end of the spring band is connected by a link with the forward end of a lever fulcrumed on the handle. The spring band engages with sufficient force the hub of the wheel, so that when the latter is turned in the right direction the wrench is carried around with the wheel, and the nut is thus unscrewed from the threaded end of the spindle.

A Horse's Sense of Locality.

About the year 1856, says the Lewiston Journal, a little colt was born on a farm in Aroostook County, in the State of Maine, a colt that was soon sold away from the place, to come shortly after into the possession of a physician in the town of Houlton, who at the opening of the civil war went "to the front," taking with him for cavalry service the colt, that had now reached maturity. Through all the vicissitudes of a five years' campaign this horse followed the fortunes of his master, being wrecked on the Red River expedition and suffering various other disasters, to return at the close of the war to the State of Maine, across which he carried his master horseback until the town of Houlton was again reached.

On the journey through Aroostook County the road traversed lay past the farm where some ten years before this horse had been born. Neither his life between the shafts of a doctor's gig nor five years of war campaigning had caused him to lose his bearings, and when he reached the lane that led up to the old farm house he turned up to the house as confidently as though he had been driven away from it but a half hour before.