

TREATMENT OF CHOLERA.

To meet the conditions of this disease, the nature of which is explained in our editorial columns, the following directions are given by Dr. Pratt in the *Missionary Herald*:—

"(1) For the stage of *diarrhea*. This may come on insidiously, painless and hence not alarming, but should be met promptly. The remedy is, 'The cholera mixture,' so called, consisting of equal parts of—

Laudanum,
Tincture of Rhubarb, and
Spirits of Camphor.

"Begin with 30 drops, taken clear and unmixed, with a little sugar placed in the mouth afterward. Repeat the dose after every evacuation, increasing it if the case becomes urgent to 60 drops (a teaspoonful), or 90 drops if necessary. If the diarrhea is not controlled by this means, an injection of from 30 to 90 drops of laudanum, in a tablespoonful of starch, will prove a valuable help. This may be often repeated. If the diarrhea ceases, do not entirely intermit the medicine, but give in gradually diminished doses, every one or two hours, for a period of twelve or even twenty-four hours.

"(2) For the vomiting stage, the best remedy is—
Laudanum,
Tincture of Capsicum,
Tincture of Ginger, and
Tincture of Cardamom seeds,

equal parts; to be given, from 40 to 60 drops, undiluted and followed by sugar, after every fit of vomiting; taking care to give it as soon as the fit ceases, when it will be more likely to be retained. An excellent adjuvant to this is a large mustard poultice to the abdomen.

"(3) For the stage of malignancy, the only remedy is stimulants, especially brandy, which must be given with great freedom, from two to four teaspoonfuls every half or even quarter hour, till heat returns, and pulse and sensibility of extremities are restored. It is always to be given undiluted. Alcohol, or other spirits, will answer the purpose, if brandy is not to be had. It will be necessary to combine with this, artificial heat—bottles of hot water to the body and extremities—friction of the limbs (which no one need fear to apply), and mustard, perhaps, to the feet and hands, stomach and limbs. Remember that boldness, to the verge of rashness, is better than excess of caution, and that no danger is to be apprehended from any of these remedies so long as the symptoms for which they are given are uncontrolled.

"The use of cold water must be strictly forbidden, except merely to gargle the throat; a very small quantity, swallowed, will bring on the diarrhea after it has been stopped for hours. A little water of gum arabic may be allowed, a teaspoonful at a time; or, perhaps, lumps of ice might be taken with safety.

"For the typhoid fever, which often follows an attack, chamomile or sage tea, and diaphoretic treatment, will be all that is needed, beside a moderate use of stimulants, for convalescence."

CHOLERA PREVENTIVE.

A Burgundy-pitch plaster worn over the region of the stomach during the prevalence of the disease. It should be warmed a little before it is put on, the person standing erect when it is applied, so that the plaster shall not interfere with the motions of the body. It is asserted that a British regiment supplied with such plasters, lost only five men during a severe visitation of cholera, and they had refused to wear them. This remedy was used by Dominic Westbrook, in his Academy, at Harlem, as far back as 1832, and in a school of 60 boys, there was not a case of cholera, although the disease was very violent in the village.

CHOLERA—DR. HALL'S LETTER.

MESSRS. EDITORS:—The article on "Cholera" in the January and February Nos. of *Hall's Journal of Health*, advance the following sentiments:—

1st. Of all curable diseases, the cholera is among the easiest cured, if promptly attended to in its first stages of two or three thin and weakening passages from the bowels, within any twelve or fifteen hours.

2d. Any remedy swallowed to prevent cholera, will increase the liability to an attack.

3d. It is almost suicidal for any man to attempt to treat his own case.

4th. That a physician should be called always on the instant of an attack, but when it is impossible to procure his services within an hour, ten or twenty grains of calomel should be taken in pill or powder, as a means of stopping the discharges, and of thus arresting the disease, until the physician arrives; because it is easiest to be procured generally—will remain on the stomach, from its heaviness, when even cold water is ejected as soon as swallowed—and because it is the most certain of all medicines known to stimulate the liver to action, this want of action being the fundamental cause of the disease.

5th. The calomel treatment has been more universally relied on in India, England, and the United States, than any other one remedy hitherto; but, as all diseases assume varying phases from year to year, it is better to rely on no previous treatment, should the cholera appear among us in 1866, but to send promptly for a physician; who, being among the affected all the time, can the quickest detect these changes, and is most competent to adapt means necessary to meet these varying phases.

6th. When cholera is prevailing, a single large, thin, painless, weakening, action of the bowels is cholera begun, and the business man should start for home in a vehicle instantly, calling on his physician on his way, and take him home with him; or if he cannot be had for an hour or two, get into bed as soon as possible, dress up warm, eat ice if thirsty, bind a thick warm flannel tightly around the abdomen, and wait with a calm, courageous confidence for his doctor's arrival; but if that arrival is delayed, and the symptoms seem to increase, then take the calomel where its healthful effect is to stop the passage within two hours. W. W. H.

MISCELLANEOUS SUMMARY.

A CONFERENCE of professors and teachers, with others interested in education, convened by the Metric Committee of the British Association for the Advancement of Science, met last Friday evening in the Lecture Theatre of the Museum of Geology, Jermyn street. The object of the meeting was to discuss the introduction of the metric system of weights and measures. A resolution was passed approving of instruction generally in the system, and that as Government practically prescribed the curriculum of the training colleges, they should be asked to make questions in the metric system a portion of the examination of teachers for certificates.

A WESTERN CLOCK FACTORY.—A clock and brass manufacturing company has been organized in Chicago, with a capital of \$200,000. Forty acres of land within six miles of the city have been purchased, and the buildings are to be erected forthwith. The capacity of the manufactory will be two hundred thousand clocks per annum, and from four to five hundred tons of brass for the market, in addition to what will be worked up in the establishment. The material for the manufacture of brass will be obtained from Lake Superior and La Salle, copper from the former and zinc from the latter. It is to be expected that the establishment will be in operation some time in July.

THE rinderpest—which we are glad to notice is generally on the decrease—has appeared in Cadzon Forest, among the famous breed of wild cattle, belonging to the Duke of Hamilton. The Duke, with the view to preserve his valuable herd of Ayrshires, has put them down in his coal pits, where they are enjoying complete immunity from the plague though it is raging above.—*Mechanics' Magazine*.

DR. PARRY accounts for the non-destructibility of the stomach by digestion, as follows:—In a state of health the blood is always alkaline, and the gastric juice acid. The introduction of food to the stomach attracts the blood to that organ, as well as determines a secretion of gastric juice, and the alkalinity of the blood protects the stomach from the action of the acid.

THE cannon cast for the Austrian navy are composed of—copper, 600 parts; zinc, 382 parts; iron, 18 parts. This alloy is reported to be excessively tenacious and easy to forge and drill.

A VINEYARD was lately sold by auction at Gevrey, in the Cote d'Or, at the rate of \$5,000 an acre, the highest price known to have been given in that country.

THE Paris Universal Exhibition of 1867 will offer to the public, among other curiosities, says the *Moniteur*, an aquarium which will be thirty metres long by twenty metres in height. It is intended, as in the aquarium of the Acclimatization Society, to bring together as complete a collection as possible of the most curious specimens of the submarine world. The size of the aquarium will cause spectators to fancy that they are under water. On looking upwards, the rare opportunity of seeing sharks, tunny fish, cod, and porpoises disporting themselves in their own element, will be given; and it is expected that this will form one of the many interesting features of the forthcoming exhibition.

M. SCHLÖESING has succeeded in discovering an arrangement by which an intense heat, sufficient to melt iron, can be got from ordinary gas. The principle of his contrivance is the complete combustion of the proportionate amounts of gas and air within a confined space, and the continuous supply of the combustible materials. A copper tube, carefully pierced, is the chief instrument in securing those results. M. Schloesing was able to melt a piece of iron, weighing 400 gms., in twenty minutes, by his plan.

It appears that the common salt occurring in nature in the Andes in process of time undergoes nitrification, being now in company with lime and the nitrogen of the air, by a process not easily explained—the chlorine of the salt going to the lime, forming chloride of calcium, and nitrate of soda being produced.

DR. GALLARD stated, in a paper to the French Academy, that in many districts where intermittent fevers had prevailed from time immemorial, the drainage effected by railway works removed these disorders.



E. F. C. D., of Md.—The best oil for light machinery is sperm oil. Any kind of wood may have gold leaf applied to it. You can obtain gilding size of any painter.

N. J.,—of.—A horizontal engine and boiler of the best make will give good satisfaction in a saw mill.

J. G. A., Ga.—We fear your broken amber pipe is a hopeless case. As all cements are dissolved or softened by heat, it follows that you cannot mend it that way. Possibly bands of silver in connection with a good cement may do. Try some good jeweller.

T. E. F., of N. H.—You ask "which bearing has the most friction, one that is six inches long and six inches in diameter, or one that is six inches in diameter and nine inches long? We will take, for instance, a locomotive axle with the same weight on each." According to Morin, the friction will be the same.

J. S. W., of N. Y.—In your estimate of the actual power of a horse you omit the light to which the coal is raised—one of the essential elements.

G. C. D., of Tenn.—We think the purple ink of your letter is one of the animal eyes; it would cost ten dollars to have it thoroughly tested, and a bottle of it would be required.

J. E., of N. Y.—Smee says that the auro-cyanide of potassium is the best salt for electro-gilding. For the mode of its preparation we must refer you to his work; it is published by John Wiley, of 535 Broadway, New York.

H. G. R., of Ohio.—Your mode of computing the velocities of pulleys is right. The velocity is in inverse proportion to the diameter. Cannot your foreman understand that the proportion of 6 to 7½ is the same as the proportion of 1,200 to 1,500. One and a half is one-fourth of six.

J. S., of Ind.—We have published the mode of making papier mache so often, we must refer you to back numbers for it.

N. C., of N. Y.—The bright scales in the stone that you enclose are mica. There is no probability that the specimen contains gold, but this can be positively ascertained only by careful assay, which will cost ten dollars.

TO OUR READERS.

PATENT CLAIMS.—Persons desiring the claim of any invention which has been patented within thirty years, can obtain a copy by addressing a note to this office, stating the name of the patentee and date of patent, when known, and inclosing \$1 as fee for copying. We can also furnish a sketch of any patented machine to accompany the claim, at a reasonable additional cost. Address MUNN & CO., Patent Solicitors, No. 37 Park Row, New York.

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If an inventor decides to apply for a patent, he should proceed at once to send us by express, charges prepaid, a model not over one foot in size, and substantially made. He should also attach his name and residence to the model.

PATENTS ARE GRANTED FOR SEVENTEEN YEARS, the following being a schedule of fees:—

Table with 2 columns: Fee description and Amount. Includes items like 'On filing each caveat', 'On issuing each application for a Patent', etc.

In addition to which there are some small revenue-stamp taxes. Canadians have to pay \$500.

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Improved Self-adjusting Blind Fastener.

Doubtless many persons have experienced annoyance from blinds slapping to and fro in windy weather, and wished for some means of fastening them securely. The ordinary devices for the purpose are not only ineffective but dangerous, for it is often necessary to reach out very far to fasten the shutters open or to detach them afterward, and accidents have occurred from persons losing their balance and falling out. Moreover, in rainy weather, if the sash has to be raised, curtains and carpets are injured. It is also agreeable, sometimes, to have the blind partly open in order to let light and air in which is impossible with the ordinary fastening.

The objects desired are obtained and the evils alluded to are all obviated by the excellent arrangement here illustrated. The details are so few and simple that they are well understood, without elaborate description.

They consist of a pair of brass rods, A, one to each blind, having a knob and pin, B, on the inner ends, the outer ends being fastened to the blind. These rods pass through holes in the sash, and are curved to the shape of the circle formed by the motion of the blind on its hinge. To the window sill is fastened a set of brass plates, C, with holes to receive the knobs. The plates may be of any desired number and are fixed at such points as parties desire. To operate the blind it is only necessary to take hold of the knob and transfer it from one hole to another without raising the sash; this swings the blind wide open or only partially so, and effectually controls its movements. This arrangement is also a lock to the blind which prevents it from being opened from the outside.

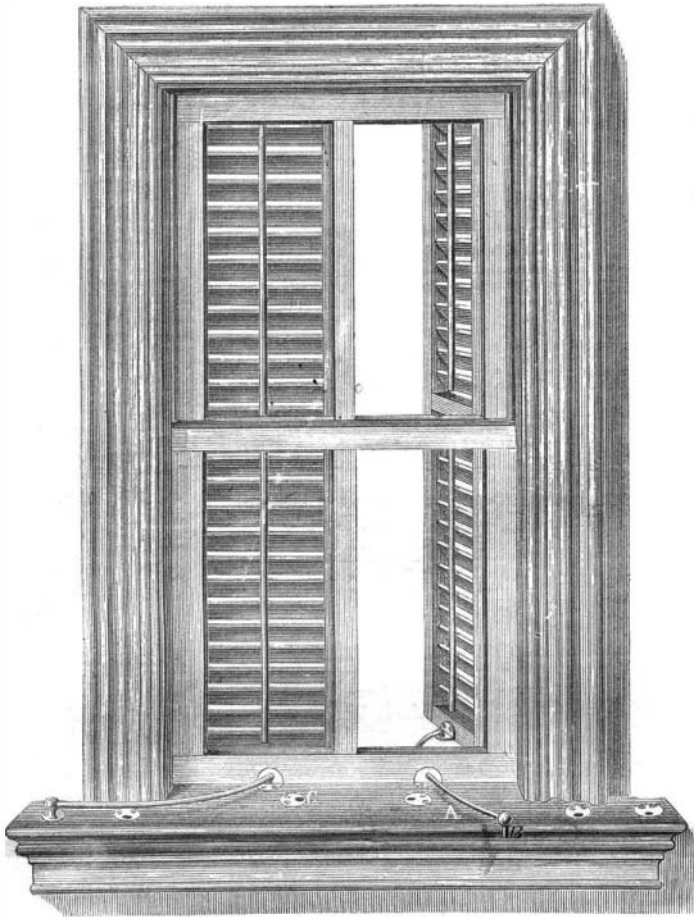
It was patented through the Scientific American Patent Agency on March 25, 1862, by Frank Chase, of South Sutton, N. H., for further information address him at that place.

Improved Doubletree.

When a team of horses is hitched to a heavy log or any other load that needs a strong and steady pull to start it, they draw willingly at first, but if it does not move they become restive and "pull altogether one after the other," as the saying is. This makes them fret so that a great deal of time is consumed in doing very little work. Moreover, it tends to make the horses balky.

In this engraving we have shown an invention which is claimed to be a remedy for these evils. The inventor provides the doubletree, A, with two cylinders, B, which have springs, either spiral or of rubber, within. The whiffletrees are attached to the eye bolts, C, as shown in the section of one of the cylinders. A cross rod, D, is also connected to

the cylinders so that they are always in line in the direction of the strain, as shown in the dotted lines. This renders both horses effective in pulling on the load, for if one gets a little the start of the other the spring is not cramped but acts the same as when both are in line. On rough roads this attachment is likely to prove effectual in saving horses and harness from shocks and sudden strains which are injurious to both. It may be used on plows or on vehicles of any class, and will encourage the horses to

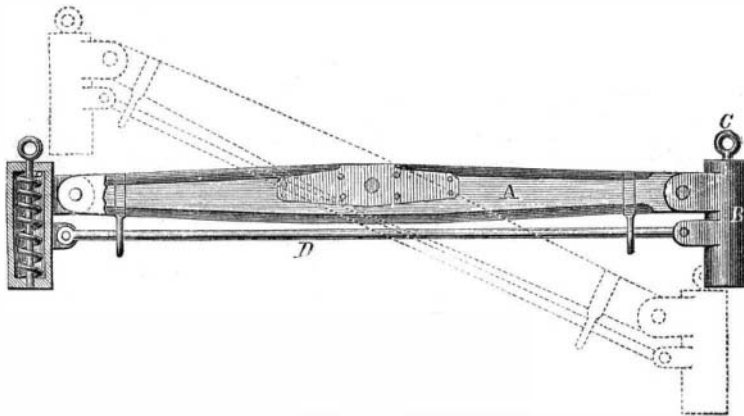
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Southern Cultivator.

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**DOWELL'S DOUBLETREE.**

surpass their former renown. The *Cultivator* will prove a strong auxiliary to the promotion of these ends, and deserves a liberal patronage. W. N. White, Athens, Ga., publisher.

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Mr. D. E. Blacke, of Belfast, Ireland, has invented an apparatus which consists of a vessel in the form of a cylinder, or otherwise, to suit the form and position of the engine to which it is to be attached, into which he introduces tubes of any requisite size and number, making them fast in the ends of the vessel in such a way that the interior of the vessel will be steam-tight, the tubing being open at the ends for the purpose of allowing the steam and water that are blown into them to pass through. The said vessel is supplied with water from the boiler or boilers to which the engine is attached, and, if necessary, from the source whence the feed water is obtained, but either of these sources of supply may be used separately. To this tubular vessel he attaches a pipe leading to the boiler or to the engine, for the purpose of allowing steam free egress or ingress. He places the said tubular vessel in such a position with respect to the engine, that the steam after passing through the engine will, before it is allowed to entirely escape pass into the tubes, his object being to communicate to the contents of the tubular vessel the heat of the steam; the steam being used over and over again for the purpose of heating

This is a novelty.—Eds.

A Natural Curiosity Made Useful.

On the South Farralleone Islands, on the coast of California, is a remarkable subterranean passage, connected with a rocky gulch, open to the ocean. Through this passage the waves of the sea force the air with much violence, and an observation of the peculiar character of the wind current some years ago induced Colonel Bache, of the engineer corps, United States army, to undertake to arrange a fog whistle which would give an alarm to mariners approaching the place. This he succeeded in doing, and the wind instrument performed at nearly all times, but with different degrees of force—sometimes "piano passages," and at others fortissimo ones. About the time of low water, when the waves do not enter the gulch, it would cease for about two hours, when its shrill music would begin again. The force of the wind in stormy weather is so great that the first whistle erected by Colonel B. was carried away, and he subsequently constructed one of a disk of iron perforated with a hole six inches in diameter. This was securely fastened by heavy bolts to the solid rock, and it proved entirely successful.

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