

produce a sensation of white with equal sectors are quantitatively identical. In short, we can now give the following conditions of the harmony of colors as certain:

(1.) *Hues derived from a pure color* (monochrome).—The degradations of one and the same color, according to the esthetic gamut, form with each other harmonious assortments.

(2.) *Hues derived from two pure colors*.—The most agreeable assortment is that of two complementary pure colors, and of their derivatives.

In the case of a tint composed of two colors it is necessary to add some advice relative to the selection of the shades, and this is, that the degree of intensity should be in ratio inverse the surfaces to be colored.

In applying the propositions that I have just formulated, it must not be forgotten that in order that a coloring shall be pleasing it is not enough that it shall flatter the eye by color, for there is a more important condition to fulfill—it is necessary to satisfy the mind, that is to say, it is necessary before all else to observe principles that are outside of the limits of the present paper, *i. e.*, those of distinct vision and concordance.—*A. Rosenstiel, in La Nature.*

#### The Mind Cure.

Professor David Swing, in our excellent literary contemporary, *The Current*, published in Chicago, has an interesting article on the influence of the mind in the curing of diseases, from which the following is extracted:

On account of the dignity and wise look of large words, says the Professor, science never uses a simple term when a large one can be impressed into service. Thus the sleep produced by long gazing at a bright object or by the hands of a Mesmer is called *hypnotism*, while the sleep which comes from disease is called a *profound coma*. Following this tendency of science to use high sounding terms, those who discovered the value of the mind in overcoming disease saw fit to name the fact or theory *The Metaphysical Cure*. As those who are the parents of a child have the right to name it, so these discoverers of a new power in the mind had a perfect right to call it by the name that most pleased them.

It has always been known that the mind can exert a good or bad influence over the body. The old mental philosophies were full of stories which had a tendency to show how persons had taken to bed after having been told, by a succession of acquaintances, about the dreadful paleness of face or of a most unhealthy expression of the eyes. It was also affirmed, in the olden newspapers, that some mischievous wife made her husband believe that he was swelling up with dropsy, and should by all means hasten to the German Springs, and should take her along as nurse, his condition being so critical. The wife thus secured a trip to Europe—her art being that of taking pieces out of her husband's vests, so that it became almost impossible for him to make them reach around his abnormal body.

The Metaphysical Cure is, therefore, not a discovery, but the expansion into a medical practice of a power which had once been little else than a curiosity. A tendency of our age is to utilize forces. Nothing so pains the American mind as the thought of having anything go to waste. We are now in a worry lest there may be an electric potency that might turn all our wheels; we are attempting to run engines by sunbeams; the waste of water power at Niagara is the grief of many; while those who have escaped these forms of distress are made unhappy because the air is not as full of balloons as the streets are of cars and wagons.

In such a day it was very naturally concluded that if mind has a power over health and disease, let us utilize this power. Let us not permit the force to escape all duty, like the waters of Niagara. Let us not permit merely artful women to use it as a means of inducing dropsy and a foreign trip. Let us domesticate this mental influence, and extract from it valuable service.

Thus came the "Metaphysical Cure" about eight or ten years ago. In the hands of extremists it is made partly one of the delusions of the world, but in the hands of the wise and moderate it is a tonic of great value, and will displace a large amount of quinine and wild cherry bitters. Its philosophy may all be summed up in the fact that the soul affects the body, and can rouse up its torpid blood, can make the liver, heart, lungs, and the brain—that nerve center—quicken their pace and use up or crowd out the diseased globules from the blood and fluids.

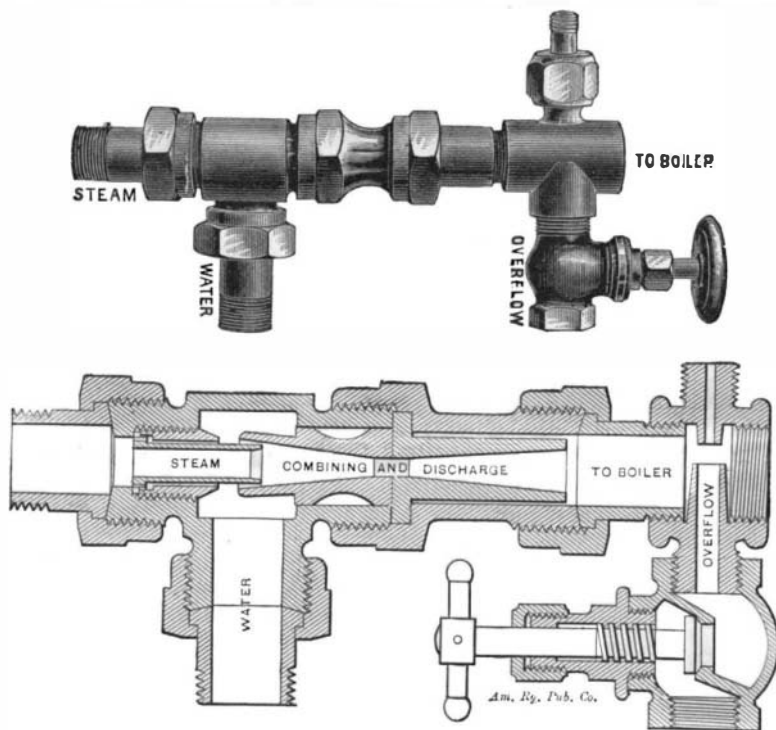
This is, then, the philosophy of the mind cure. It can do much for man, and is not to be reproached because it cannot do everything. If the influence of the mind may benefit one sick person in twenty-five, it will then surpass in value many popular medicines;

and if it shall prevent many others from falling into any imaginary illness, it will confer a second benefit upon the community. Man is not in a condition to reject the help of any of nature's kind offers. By means of all these discovered helps the evils of ill health may be mitigated, if not banished from the world. Will, energy, medicine, fasting, good air, good food, good water, are all friends of health, but no one of these is master of the entire field of ailment. He will act most wisely who employs all these causes at different times of need.

With masses of evidence of the power of mind over matter, either to weaken it or to build it up, it is high time for us all to invoke the aid of this spiritual influence in not a few days of life; but to call it a general practice of medicine is to attempt to make a part equal the whole. This feat the new practitioners are attempting to perform. They are even attempting to cure disease when it is far away from the alleged doctor—the doctor throwing his mental force a thousand miles, and making it land like a bombshell amid the works of the enemy. This is that *reductio ad absurdum* which has been common in all times.

#### THE "UNIQUE" SINGLE TUBE INJECTOR.

The accompanying engravings show an injector possessing many admirable features, and, as will be seen, the aim of the manufacturers to make a perfect injector of the simplest construction, so as to be readily understood, has been most successful. This injector may be placed in any position, requires no change for varying pressures of steam, and the arrangement of its parts is such that the tubes can be conveniently taken out and



THE "UNIQUE" SINGLE TUBE INJECTOR.

cleaned when required. As it has no special valves to become defective by use, the necessity of often sending the injector to the maker for repair is avoided; all of the valves and fittings here required can be found where supplies for steam fitters are furnished. The overflow valve can be located at any point between the injector and check valve that may be most convenient. This style of injector is made either non-lifting or lifting, the latter form being shown in perspective and section in the cuts.

The "Unique" injector is made by the Rue Manufacturing Company, of Filbert Street, Philadelphia, Pa., and although it has been on the market but about a year, its success has been most flattering. It is made of gun metal, neatly finished, and all the parts are fitted to standard gauges.

#### The Olive Oil Industry at Leghorn.

As soon as the oil is received at the warehouse, it is placed temporarily in tanks and large earthenware jars to settle. New oil from the country is always thick, and in winter time generally congealed; after having been allowed to remain undisturbed for six or eight days it is, if still congealed, slightly heated before being placed in the filters, in a large tin lined pan, with a double bottom or jacket, through which steam is made to circulate. Thus the oil does not come into contact with fire, but is gently warmed by steam until it is quite fluid. The oil filter is a rectangular wooden tank, lined inside with tin, and it is divided into two compartments, an upper and a lower one. The oil is pumped into the upper compartment, and is allowed to filter through perfectly clean carded cotton—brought here from Malta, and preferred to any other on account of its purity—into the second or lower compartment, when it has again to pass through another layer of cotton, and finally comes out into a tank placed beneath the filter, from which, if perfectly bright, it is pumped into large marble lined tanks, holding about 50 tons of

oil each. If the oil is not perfectly bright it is passed through the filters again and again until it becomes so. As a rule, however, oil, particularly if of the finest quality, becomes perfectly bright after one filtering. In the large tanks the oil is allowed to remain undisturbed until required for exportation, whether for Great Britain or the United States of America.

#### Concentration.

Among the powers of the human mind that seem of themselves to make life worth living, that of concentration occupies a prominent place. To be able to fix the thoughts or the attention exclusively upon one subject, and to keep them there without wavering as long as is necessary, is a most important element of success in every occupation. It is a common mistake to think that although this ability is essential in professions, in literary pursuits, in the management of large enterprises, or in any position involving the laying of plans or the carrying out of systems, for the ordinary and commonplace worker, especially if his work be chiefly manual, it is of little consequence. This is one of those fallacies which lie at the root of much of the poor, inefficient, and inferior quality of work which is offered to the world in quantities far exceeding the demand. It is a well known fact that while hundreds of unserviceable men and women stand idle, waiting for employment which does not come, every one who is able and ready to do superior work in any department is eagerly caught up, and may almost command his own terms.

One of the most radical differences between these two classes of workers is this very power of concentrating the energy and strength of both body and mind upon the work immediately at hand. Two men, working side by side in the field or the factory, may be equally competent, as far as knowledge or physical strength or previous training go, to perform the labor before them. They begin with equal promise of good success, but in a short time, while one is persisting, the other is relaxing in effort. One pursues his work with unremitting zeal; the other spasmodically, with intervals of wandering thoughts and flagging attention. It is already an assured fact that the one who has acquired the habit of concentration will be the successful competitor. He will be anxiously sought for and re-engaged, while the other will soon go to swell the ranks of the unemployed. It matters not what is to be done; from the simplest mechanical work to the most abstruse and complex mental operation, the power of putting all the thought, energy, and attention on that and nothing else for the time being, will very largely determine the quality and amount of labor performed.

To some extent this is a natural gift. We see children at play who, without other motive than their instinctive tendencies, persist continuously in any effort they make, or purpose they form, with a perseverance and earnestness which may well shame many of their elders, while others will be distracted by every passing object, and forget their determinations as soon as they are formed. Yet here, perhaps more than in most tendencies, culture and practice come in to strengthen what is lacking. The discipline of the schools is most valuable in developing the concentrative power in the province of thought, and it would be a blessing to every child if, in some way, a like discipline helped him in the work of his hands. Like every other faculty, this, too, is strengthened by exercise. Each time we recall our scattering energies and wandering thoughts, and force them resolutely in one direction, we increase the power and develop the habit, and the exertion, at first painful and laborious, becomes in time easy and agreeable.

Mr. Thomas A. Edison attributes his success as an inventor largely to this faculty, which he gained by steadfast exertion, once being able only to think upon a given subject for ten minutes before something else would come into his mind, but gaining by long practice the power of continuous and uninterrupted thought for hours on a simple topic. At one time he worked with his assistants in trying to connect a piece of carbon to a wire. Each time it would break, and they would spend several hours in making another, until after working in this way one day and two nights they finally succeeded.

This habit does not necessarily make a person so absorbed in one thing as to become narrow and one-sided. He may become so by yielding wholly to a native impulse of dwelling on one thing; but the same self-control that concentrates his energies at will can also divert them at will into another channel when the proper time arrives. Many things rightly claim our attention, but none of them will receive it aright if our thoughts aimlessly wander from one to another, without compass or guide.—*Phila. Ledger.*

PROTECTIVE inoculation against yellow fever is being tried extensively in the Mexican army.