IMPROVED CLOTH PRESSING MACHINE.

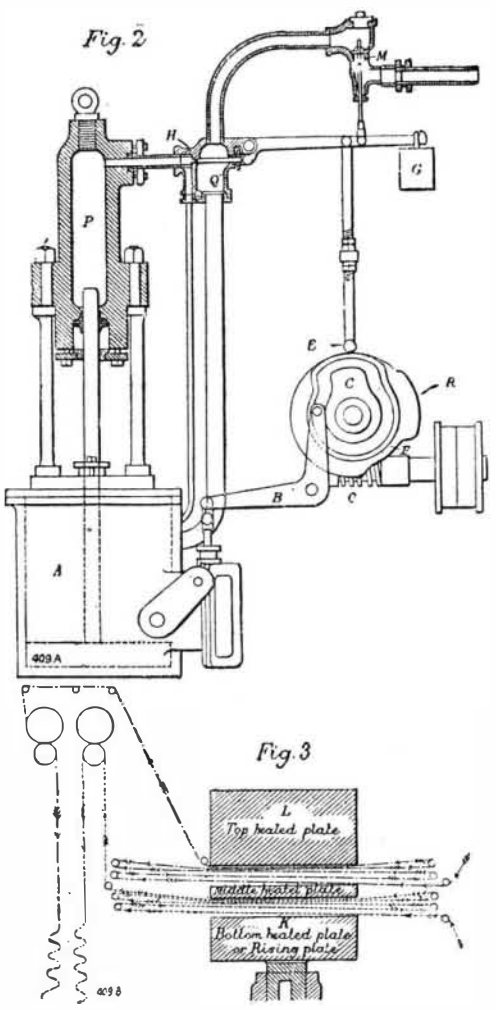
We give illustrations of Nusseys & Leachman's cloth pressing machine, made by Messrs. W. B. Leachman & Co., of Leeds, and described by *Engineering* as follows:

Fig. 1 is a general view, Fig. 2 is a sectional elevation of the motive part of the machine, and Fig. 3 a section through the pressing part.

The apparatus, it will be seen, is a combined steam and hydraulic arrangement. The cloth to be operated upon is passed through heater plates, which rise and fall to give the required pressure, and is wound on the rollers seen above the machine. It will be evident that the winding on the rollers cannot proceed while the cloth is being pressed between the plates, and an intermittent action is, therefore, required. The pressing and winding operations are automatic, so that the cloth is transferred from the rolls, on which it comes in unpressed, to those on the machine, without any labor being required beyond stitching the lengths together, and one man and a boy are sufficient to look after the machine.

This is a great advantage for the manufacturer, as there has been in some districts a good deal of trouble with the men who have been employed, under the usual system, in lifting the cloth in and out of the old presses. These operatives have been well organized, and have laid down very stringent regulations as to the size and weight of pieces of cloth that should be handled, they refusing to deal with larger pieces, no matter what the rate of pay might be or how many men might be allowed to the job. Messrs. Leachman's machine has got over this difficulty, and men have no longer to complain that they are asked to handle pieces of cloth larger than they fancy. Like most benefactors of their kind, however, Messrs. Leachman received at first small thanks; indeed, for some time the post bag of the firm was largely taken up with letters containing threats to "do for" the principal, unless he stopped making these—in the letters—strongly adjectived machines.

Referring to Fig. 2, A is the steam cylinder, taking steam only on the lower side of the piston, by means of a slide valve, which is worked by the lever, B, in turn actuated by the cam, C. The hydraulic pump, P, is thus worked. When steam is being admitted the runner, E, is clear of the cam at the point, F, so that the weight, G, can press the valve on to the valve face at H, leaving a free passage from the pump, P, into the pipe, I, and closing the pipe, Q. For lifting the pressing plates there is a compound ram, a smaller one within a larger. The former is sufficiently powerful to bring the large ram and the plates up to the work, at which time the full power is put on to give the pressure required to treat the cloth. The pipe, Q, previously referred to, leads to the larger ram, and the branch, I, to the smaller ram. As the larger ram is being lifted (during the first part of its upward stroke) by the smaller ram it is necessary to fill the space it leaves in its cylinder, and this is done by means of the valve, M, which opens communication between an elevated tank and the big cylinder. The cam continues its revolution until the elevation, O, comes in contact with the runner, E, which is pressed upward, and thus, by means of the valve, H, opens communication between the hydraulic pump cylinder and the pipe, Q, leading to the large ram; at the same time the valve, M, is closed by the superiority of pressure in the pump over that due to the elevation of the tank. It is at this time that the full pressure is exerted on the cloth. During these operations the full pressure has been admitted to the steam cylinder, but the cam now opens the exhaust by means of the lever, B. The cam arrangement is best shown by the perspective view.



It is now necessary to release the water pressure, so as to let the presser plates fall, and allow the winding of the cloth on the rollers to proceed. This is effected by means of the projection, R, on the cam. This lifts the runner, E, and by means of the spindle shown raises the valve, M, thus opening an exhaust passage. The mechanism by which the cloth is wound on the rollers and is thus drawn through the press is very simple. There is a stop on the bottom heater plate, K, Fig. 3, which sets the actuating gear at work and throws it out of action intermittently, so as to synchronize with the pressing and releasing of the cloth between the plates.

The small rollers over which the cloth is led backward and forward through the press are shown in Fig. 1, and diagrammatically in Fig. 3. These rollers are actuated by gearing, one pinion of which is seen in Fig. 1. In our perspective view no cloth is shown in the press, but there were some sheets of paper between the

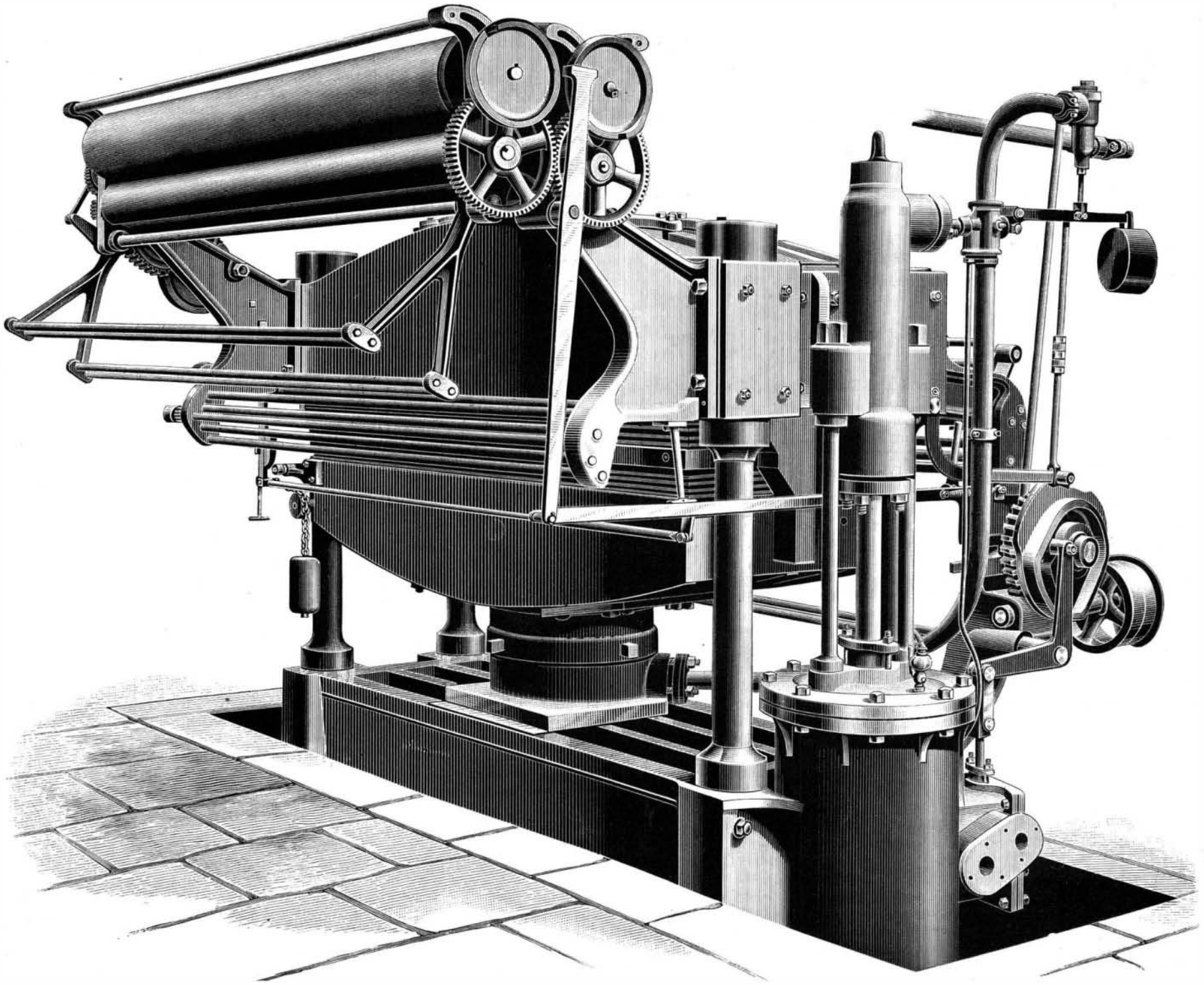


Fig. 1.—IMPROVED CLOTH PRESSING MACHINE.

plates when the photograph from which our illustration has been made was taken. These have been reproduced by the engraver. A pressure of 350 to 500 tons is put on at every stroke and the cloth is drawn the width of the plate each stroke, and receives five nips in all. Two pieces can be done at once, as shown by Fig. 3, the rate being 480 yards per hour of wide width, or double that length of narrow widths.

There are now over fifty of these machines at work, many of them being supplied to some of the largest mills in this country and on the Continent. The makers claim a saving of one-half in the original cost of the machine compared to one of the older type producing the same amount of work. The saving of space is also said to be considerable. One machine requires a space 18 feet by 14 feet, whereas the older presses producing the same amount of work would take up four times that room.

Plans for the Dedication of the Columbian Fair, October, 1892.

There will be some novel sights in Chicago, October 12, 1892, if the plans of the World's Fair Committee on Ceremonies be carried out. October 12 is the day set apart by Congress for dedicating the great buildings in Jackson Park, and the Ceremonies Committee has provided for oratory, music, a military review, tableaux illustrating the life of Columbus from a boy to a discoverer, the landing of the Pilgrims, the burning of Chicago, and a civic and industrial parade. There will be fireworks along the lake shore, the booming of cannons, and there will be present, if the plans be carried out, distinguished foreign potentates and citizens, the President of the United States and his Cabinet, the Governors of all the States, and other great men of the nation.

To carry out these ceremonies the directory has appropriated $150,000, and a programme has been prepared by the Joint Committee on Ceremonies. The programme covers four days, beginning Tuesday, October 11. It is reported by the committee as follows :

The committee decided to invite 10,000 troops, proportioned among the States and comprising the flower of the National Guard of the United States, to participate in the dedication ceremonies. In addition to the National Guard the government will order several regiments and batteries to report here at the same time.

FIRST DAY.

The grand parade of troops will take place Tuesday through the principal streets of Chicago and will end at Jackson Park, where the encampment will be held.

Tuesday evening it is proposed to give a series of tableaux representing salient historical facts in the life of Columbus, of which the following is a brief description :

1. Columbus as a boy, in his humble home in Genoa.
2. Columbus in Lisbon, awaiting the tardy action of King John II.
3. The dream of Columbus. He has fallen asleep over his work and sees in his dream the fulfillment of his own ambition. The panorama moves, showing an unknown ocean ; a beautiful tropical land appears ; birth of a new empire.
4. Columbus before King John II., who refers him to the Council on Geographical Affairs.
5. Columbus before the council.
6. Columbus at the court of Ferdinand and Isabella at Cordova.
7. Columbus before the council at Salamanca in September, 1486, representing a room in the Convent of St. Stephen's.
8. Columbus before the gate of the little convent on the hill with his young son.
9. Small room in same convent. A painting on the wall representing the world as it was known at the time. Columbus explaining to the friar his grand idea.
10. Columbus departs for France. The Mountain of Elvira and Bridge of Pines. Columbus and his mule. Stopped by the Queen's courier. The message from heaven.
11. Departure from Palos, Aug. 3, 1492. Three caravels preparing to sail.
12. Night scene, time 10 p. m., Oct. 11, 1492. The Santa Maria, full rigged. Columbus and figures of sailors seen upon the deck. A distant light, to which Columbus is directing attention.
13. Landing of Columbus, the morning of Oct. 12, 1492. San Salvador. Planting the standard of Spain. Tropical scenery. Natives looking upon the scene with fear and awe.
14. The Court of Barcelona. Ferdinand and Isabella give a royal welcome to the great discoverer, who presents them with a new kingdom. Natives, strange woods, flowers, etc., from the new world.

SECOND DAY.

Wednesday, Oct. 12, will be the main day of the dedication ceremonies, and will be ushered in by a national salute of forty-eight battery volleys fired by all batteries in attendance. At 10 o'clock a. m. the troops will be formed and escort the President of the United States, the diplomatic corps, and distinguished foreigners to the main building. Upon the arrival of the President the consolidated bands will play "America." The entrance of the thirteen original States will take place with appropriate ceremonies—banners emblazoned with the coat of arms, the States represented by their governors, uniformed staffs, etc. Then in reasonable rapidity the different States in order of their entrance into the Union.

The following or a nearly similar programme of exercises will take place :

1. Music, "Star-spangled Banner" or "Hail Columbia," with full chorus and orchestral accompaniment.
2. Prayer.
3. Commemoration ode set to music, with full chorus and orchestral accompaniment.
4. Address and report from Director-General.
5. Presentation of buildings by the President of the World's Columbian Exposition to the President of the National Commission.
6. Cantata arranged expressly for these ceremonies.
7. Buildings presented by the President of the National Commission to the President of the United States.
8. Dedication oration.
9. Hallelujah chorus.
10. National salute of forty-eight battery volleys.

Wednesday evening there will probably be a continuation of tableaux representing historical events in American history, from the discovery to the present time, embracing the following scenes :

1. The Mayflower, landing of the Pilgrims, the "stern and rock-bound coast," Plymouth Rock.
2. Group of Pilgrims making treaty with the Indians. Miles Standish, Brewster, Winslow.
3. William Penn and his associates ; historical tableaux.
4. Signing the Declaration of Independence ; historical characters fully represented.
5. Washington, Rochambeau, and Lafayette in consultation.
6. Surrender of Cornwallis.
7. Inauguration of Washington.
8. Development—Fulton's boat, Cunarder, matches, electrical appliances, railroads and bridges.
9. Discovery of gold mining. Camp.
10. "Westward the Star of Empire takes its Course."
11. War.
12. Emancipation.
13. Peace—Allegory.

11, 12 and 13 to be arranged in grand transformation scenes.

14. Burning of Chicago ; grand transformation scene; rebuilding ; World's Fair.

THIRD AND FOURTH DAYS.

Thursday there will be a mammoth civic and industrial procession, which will fully illustrate all departments of industry. It is expected to arrange floats on platform cars and move them over the cable lines of the city to Jackson Park. The evening will be devoted to fireworks in all the parks and upon the lake along the entire front of the city.

Electricity in Tooth Extraction.

A small party of medical men and dentists lately met at the Institute of Medical Electricity, 35 Fitzroy Square, W. C., London, to witness a demonstration of the new method of extracting teeth without pain. One of our staff was there. We sent the one who has most experience in the shocks and squirms of the dentist's chair, and he was imbued when he left the office with more than his share of skepticism regarding the powers of electricity in drawing teeth. He came back brimming full of enthusiasm about the "vibrator." This is what the electrical arrangement is called. It is a simple arrangement, consisting of a neat walnut case, within which are a couple of bichromate cells and a Ruhmkorff's coil to which is attached a commutator of extreme sensitiveness. The commutator is the secret of the whole affair. It is a thin ribbon of highly tempered metal, secured at each end by an elaborate arrangement of screws. It is capable of vibrating at a tremendous pace—so quickly, indeed, that it is really musical—and the force passing through the coil is regulated until the vibrator is in unison with the key A, which the Philharmonic Society says is equal to 420 vibrations per second.

The operator was Mr. Burgoyne Pillin, L.D.S., who stated that he was a visitor himself, not being connected with the institute. He had four patients in waiting. The first was a young professional man, who seated himself in the operating chair to get a bicuspid extracted. He got the handles of the battery in his hands. One of these is connected with the negative pole. The positive is divided into two, so that one of the divisions is connected with the handle and a wire from the other division is screwed into the handle of the tooth forceps. When the patient takes hold of the handles the current is gradually increased in intensity until the patient can bear no more ; then, while the forceps are being introduced, the current is turned off for a second, and on again. The rest is the same as without electricity. "Had you no pain ?" asked our representative of the patient when the roots of the bicuspid were held up to view. "Not a bit ; I only felt the grip." "What did you mean by stretching your body, then ?" "Oh, that was when the current was turned on." "You didn't feel the frightful wrench, then ?" "No," was the reply. Our representative was still skeptical, it will be seen. All this skepticism went with the next patient, a young and robust-looking lady, who had the left anterior upper molar troubling her. She took the chair, and quickly enough Mr. Pillin had his forceps on the shell. Crack it went, and the usual thing followed—three separate extractions, the last bringing away part of the crown and two twisted roots an inch in length—as bad a case as one could wish to see. It took some time to persuade the patient that her tooth was out. "I felt no pain," she said, after she had an affirmative reply to her question, "Is it out ?" The next patient was a young lad who declared that he felt like getting a shave (he had not got his first). His lower bicuspid was also quickly brought to view, and he went out with a smile.

The next turned out to be a bad case. The tooth was fearfully exostosed, and it was only by a prolonged wrench, which was painful to look upon, that Mr. Pillin got it out ; but the patient showed not a trace of pain, and he, like the others before him, was quite free from shock. This is one of the characteristics of the process : there is no nervous shock.

The four cases were typical, and all the experts present were enthusiastic about the success, and loud in their praises of Mr. Pillin's skill. Now, why is it that electricity prevents pain ? was the question that every one was asking. Simple enough, said Dr. Arthur Harries, the physician to the institute. "Electricity travels over the nerve at the rate of 420 vibrations per second ; pain travels from the tooth to the brain in one-sixtieth of a second. My theory is that the electricity, being so much quicker and having the greatest force behind it, gets to the brain first, and then keeps the line for itself, crowding out the pain." If Dr. Harries' theory is right, what a future there is for electricity in surgery! Chloroform and all other anæsthetics will have to take a back seat, and we shall banish pain simply by not allowing it to be produced.

There are other points about the vibrator which we should like to speak of, but need only mention that there is less bleeding and that it interferes in no way with the operator. It is really a good thing, thoroughly sound in principle, and without any humbug about it. —*Chemist and Druggist.*

Ghost or Shadow Pictures in Photography and the Twin Brothers.

To the majority of amateur photographers the camera is mainly an instrument by which they can make the likeness of a friend or copy a landscape ; but few are aware of the entertaining and amusing results that may be obtained apart from the ordinary routine.

One very striking picture that may be made is a man seated at a table writing, and his own ghost—through which the objects of the room may be faintly seen—standing behind his chair. Or a man starting back in terror from his own ghost, or even a pair of them.

Another very amusing picture—which I call the twin brothers—is two or three perfect busts or figures side by side, but both or all three the same persons. It would take too much space to give a thorough description of this style of photography, but I will here give directions for making the above mentioned pictures, and the operator can obtain any variety he chooses by following the same principles.

Ghost or Shadow Pictures.—Make a background the required size by stretching out some black material. Place your subject—draped in white or light colored clothing—in position to the right or left of the center of the background. Focus and expose for half a second, and the impression on the plate will be a shadowy, ghost-like figure. Next take a chair and a table, and place the chair in the center of the background and the table on the opposite side to the ghost. Seat the same subject in the chair at the table, focus again, and give full exposure, which, if the light is good, should be about two seconds. Develop and print in the usual way.

Any object that you wish to be seen through the shadowy figure must be subjected to a quarter of a minute's exposure before the figure is placed in position.

The Twin Brothers.—To make this picture, place the subject in position on the right of the center of the black background, focus, and expose for two seconds in good light. Now place the subject on the left of the center of background and focus again, giving the same exposure. If you have left room enough between the two figures, you may now take a chair and place it in center of background and seat the subject in it, focus, and give again the same exposure. Develop plate and you will have the two, or three, twin brothers. This line of photography offers a great scope for originality and skill, and I would be very glad to hear of an exhibition held for this kind of picture alone.

ARTHUR SMEDLEY GREEN.
4517 Main St., Frankford, Pa., March, 1891.

Rust.

At a recent meeting of the Leeds Association of Engineers, Professor Smithells delivered a lecture on "Rust." He remarked that if they were to do anything on the subject of rust, they must begin by studying the conditions under which rust was formed, getting to know as much as possible about the phenomenon itself. The question was, Was it the chemist or engineer that was to tackle the problem? The answer in this case, as in so many others, was that the two must work together, they must combine theory and practice. His object would be mainly to take the chemist's attitude, and to explain to them the chemistry of rust, and to hint at one or two ways in which attempts had been made to obviate its formation.

Rust, of course, was more or less a general phenomenon. It was not restricted to iron, but was most noticeable in the case of iron because iron was the most abundantly used metal, because the rust of iron formed rapidly, because it assumed a scaly character, because of its color, and because of the fact that rust was a thing that appeared to grow in the case of iron, and it did not grow so rapidly, if at all, in the case of other metals. Most metals, of course, did rust. They knew they could not expose the bright surface of copper or zinc without the surface becoming dim. These metals might, therefore, be said to rust in their respective ways, but the rusting was very slight as compared with iron, which was the most susceptible to rust. Iron rust was found to consist of three elements—iron, oxygen, and hydrogen. That rust did contain water could be shown by the simplest experiments. That rusts were oxides they could easily prove, because they could produce rust by burning metals in oxygen alone. Hence there could be no other element present; but the way that might appeal to them would be by getting the metal back again from the rust, and the oxygen as well.

The lecturer demonstrated this by experiments with iron rust. The experiment he had done, he remarked, was a very suggestive one, because in getting the iron back from the rust in that particular operation he had done what had to be done so often in the process of soldering. They knew that before they could unite two pieces of metal by solder they must use a flux. The reason was that the two metals might be covered with a thin film of rust, and the solder would not adhere to these two unclean surfaces. What was the cause of iron rust? They all knew that rusting was favored by the presence of the air, and by the presence of moisture, but they wanted to know which of these two was the active agent, whether both were necessary, and whether anything else took part in the process. They wanted to know why rusting went on so rapidly and at different points, and how it was affected by the different composition and qualities of the metal, and by impurities in the metal, in the air, or in the water. Professor Smithells then showed some specimens of iron in jars, which he had been preparing for some time. One was a piece of iron in dry oxygen, and he explained that that would not cause the iron to rust.

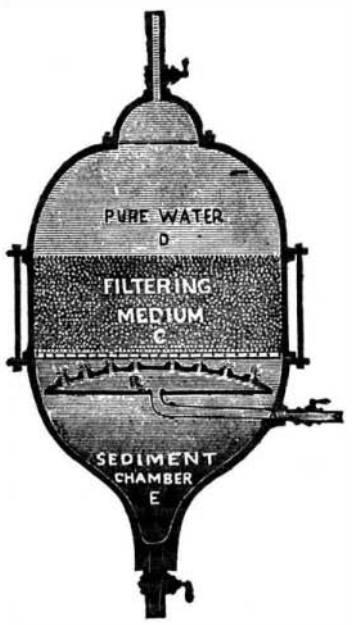
Next he showed a piece of iron which had been sealed up in water for some days, remarking that it was found that when they excluded air and other gases from the water no action took place, and a second conclusion was that water alone would not affect iron. The next question was—Would air and water together affect iron? That experiment had been tried, and it had been shown that, wherever action had taken place at all, the action had been exceedingly insignificant, and the question arose—What was it that was absent and that caused the rust? The one ingredient which was present in one of the jars, and was not present in the cases he had shown, was carbonic acid gas.

Carbonic acid gas existed in the atmosphere to a small extent, and it was this gas in the air that was all important in the operation of rusting. Pure air, pure water, pure carbonic acid, would not act singly upon iron; pure water and pure air would not act together upon iron; carbonic acid and air would not act upon iron, but when they had carbonic acid, water, and air together, they got rust. It was carbonic acid that really set up the rust action, and when it was formed, the carbonic acid was liberated and attacked the layers beneath. That was why rust had got the property of traveling inward. How could they prevent this action of rusting? There were many things which had been tried. They might paint the iron, and if they observed certain precautions, they might have an effective method.

One precaution was that the metal must be perfectly clean. A spot of rust embedded below a coat of paint would often break out of itself. Then there was the method of covering the iron with oils and tarry matters. There was also the process of galvanizing iron, the process of enameling, which was very useful for small articles, but the enamel was apt to chip off, and there was the Bower-Barff process, which was worked at Keighley, and which was an admirable process. Alluding to boilers, he said that by putting soda into them not only did they correct acidity of the water, but they introduced something which would absorb the carbonic acid gas, and prevent it acting in a rusting capacity.

THE DARRAGH WATER FILTER.

Of the many water filters that have from time to time claimed the attention of the public, this, according to the inventor, is the only one that perfectly clears the water of all animal, vegetable and earthy matter, without in the least retarding its flow, and thoroughly filters any quantity that can be passed through the inlet.



THE DARRAGH WATER FILTER.

It may be applied to the main where the water enters the premises, and thus all the water delivered will be filtered.

The water enters the filter through pipe, A, into spreader, B; from there, by a very slow movement, to and through the filtering medium, C, which is four hundred times as large as the supply pipe; thus passing the water, without retarding its force, to space, D, from which the filtered water is drawn.

The space, E (around and below the spreader), is the sediment chamber into which all impurities fall when separated from the water.

To cleanse this filter it is only necessary to partly close the valve on the supply pipe, open the lower outlet valve, and in a few seconds it will be cleaned and ready for use; and this should be done as often as once each month.

Filtered water should be used where it is possible to obtain it, for health depends upon it.

Probably impure water is productive of more sickness and death than any other single cause. In it are hidden the germs of disease not visible to the eye, and seldom detected by the taste. In cities and towns especially, where nearly all the water is collected in reservoirs, tanks, or vessels of some kind, and distributed through pipes, there are accumulations of sediment through months and years, constantly polluting the water passing over it, and taking up the poison lurking in the deposit, and transmitting it for drinking, bathing, and general use.

Those who are familiar with the tank process of storing water, for family and other use, will bear testimony as to the vile matter that accumulates in them; and to the fact that they are seldom cleaned.

Those who use steam boilers, or hot water tanks, know by experience the cost resulting from the use of water for heating purposes, or generating steam, which is supplied direct from the pipes. Many boilers have been destroyed by the accumulation of animal and vegetable matter contained in Croton water (which is claimed to be the best in use), notably the steam plant in the Park Avenue Hotel, New York, where the boilers have recently been replaced by new ones, being entirely destroyed by the flues and tubes being filled by sediment baked to a solid mass, and due to use of unfiltered water. The Darragh Water Filter Company, 1539 Broadway, will give further information.

THE total forest area in the United States is estimated at 481,764,599 acres.

Differential Diagnosis of Dental Pain.

In the *Journal* of the British Dental Association, Mr. H. Baldwin, M.R.C.S., gives the following useful table. For simplicity, the two kinds of pain may be called "nerve pain" and "pericemental pain."

NERVE PAIN.	PERICEMENTAL PAIN.
Arises suddenly.	Arises gradually.
Terminates suddenly.	Terminates gradually.
Is not continuous.	Is continuous.
Is chiefly non-localized.	Is distinctly localized.
*** Much neuralgia.	*** No neuralgia.
Tooth always sensitive to thermal changes.	Tooth not sensitive to thermal changes.
Percussion or pressure does not necessarily cause pain.	Percussion or pressure causes much pain.
Tooth not raised, not loosened.	Tooth raised and loosened.
Tissues around not inflamed, not tender on pressure over root.	Tissues around inflamed, tender on pressure over root; in chronic cases tissues thickened.

In using this table it must always be borne in mind that the two conditions of pulp inflammation and pericemental inflammation may co-exist either in the same tooth or in different teeth; and then the relative importance of the two inflammations will be determined by the relative severity of the two sets of symptoms, and sometimes by the history.

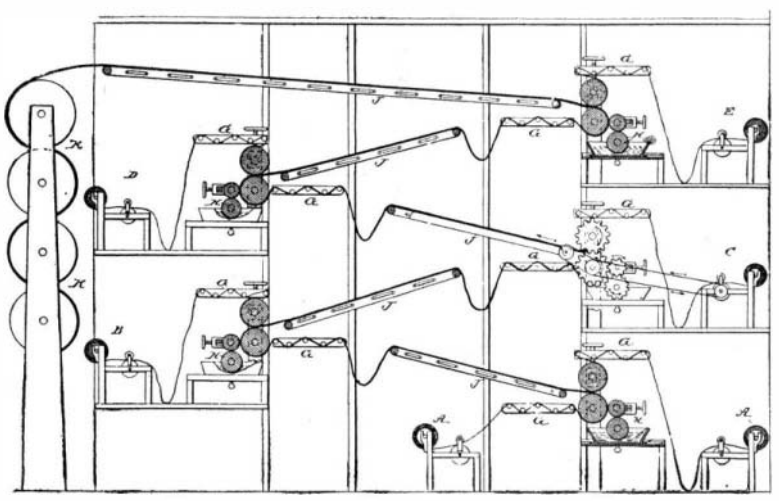
Good Suggestions for Dyspeptics.

A writer, evidently of a practical turn of mind, tells a contemporary how easily the wakeful dyspeptic can be made to slip off into the land of dreams. He says:

"The dyspeptic, of course, eats a light supper, may resort to the use of a towel, wet with tepid water, and covered with a dry cloth, the whole then applied to the pit of the stomach. Before the sufferer knows it she will float into shadow land, such is the sympathy between the organs of digestion and the brain. Owing to the position of the stomach, a light sleeper ought to sleep on the right side instead of the left, never on the back. If there is a tendency to cold feet, a thin woolen blanket may line the lower third of the bed. The limbs ought not to be greatly flexed, a position which prevents free circulation, and they should rest one upon another lightly. The night light, where used, ought to be a tiny taper, and not gas or kerosene, both of which devitalize the air. A darkened room is the best. Nature puts out her light, and draws the curtain of darkness for a purpose. With good habits, physical and mental, and a determination not to deal with anodynes, sleep may be won from its shyest lair to watch over the restless pillow."

A CARD-BOARD MAKING MACHINE.

An easily operated machine for making card or paper boards, by pasting together two or more layers of paper, is shown in the accompanying illustration, and has been patented by Mr. John McCoy, of No. 525 West Philadelphia Street, York, Pa. In the picture, A A represent the starting rolls of paper, and B, C, D, E, successive adding rolls, the number to be increased or decreased according to the thickness of board to be made. The tension device, G, pasting rolls, H, and driers, J, are alike for the several parts. The pasting rolls are each journaled in a paste trough, and apply the paste to the inner face of one of the layers of paper as the paper passes from the tension device and before it passes between the pressure rolls. The drier, J, receives the paper immediately after it leaves the pressure rolls, and serves as a support and carrier for it toward the next tension device and pasting roll, where the next sheet of paper is added. The driers are in the form of endless canvas aprons supported on rollers, one of which is driven and the other turns loosely, while steam or other heating pipes are arranged between the inner surfaces of the aprons, whereby the heat may be evenly applied to all parts of the board or card, and the canvas be kept constantly dry. The opposite sides of the web forming the card-board are alternately exposed to the successive driers in its passage through the machine, the board, after passing the last pressure rolls, being conducted over a drier to a set of calendering rolls, K. It will be seen that with this machine, linen, cotton, or other cloth may be readily pasted in with the paper when so desired, or one or both of the last adding rolls may carry a tinted paper with which to form the finished surface of the card-board.



McCOY'S MACHINE FOR MAKING CARD-BOARD.

Negro Physicians.

The fifteenth anniversary of the Meharry Medical Department of Central Tennessee College was held February 19th. The Nashville *Journal of Medicine and Surgery* says that more than one-half of the educated colored physicians of the Southern States are graduates from Meharry College. With scarcely an exception, they have been cordially received by the white physicians, who have consulted with them in dangerous cases, and assisted in difficult surgical operations.