

Scientific American.

NEW YORK, SEPTEMBER 11, 1858.

The Great Celebration and the Atlantic Telegraph.

Our whole country, from its circumference to the center, has been electrified by the successful laying of the Atlantic Telegraph—that instantaneous highway of thought between the Old and New Worlds. It was an enterprise in regard to which all men wished for success and certainty. Great honor is due to those who devised and organized the project, and conducted its operations. The indomitable perseverance which they exhibited under so many difficulties and embarrassments of an adverse character, and their final triumph over all these, deserve the highest praise. The names of the most prominent of these parties—Field, Morse, Everett, Bright, Hudson, and others—have been held up before our people with marked respect. But perhaps the grandest feature in the whole affair was the spectacle of the two greatest nautical and Christian nations in the world employing their resources, and noblest vessels of war, in carrying out this gigantic scientific and commercial undertaking. We hope it may be an augury that war shall hereafter be unknown between them, and that in future their rivalry shall be “mutual co-operation to advance arts, commerce, and science.”

Wednesday of last week was set apart as a day of public rejoicing in New York for the success attained in laying the cable, and we never witnessed on any previous occasion such a grand and universal demonstration. All classes, orders and societies turned out in procession to offer testimony to the feelings generally entertained towards those who were engaged in the accomplishment of the triumphant event. The officers of the frigate *Niagara* and those of the British war steamer *Gorgon* were received in style by the city authorities.

Te Deum was executed in Trinity Church in honor of the occasion. Titled lords, prelates and priests graced the spectacle. Magistrates from distant cities, and soldiers from Canada took part in the services. The crowning arch in the grand cavalcade, however, was the appearance of the industrial trades. Printers, coopers, millers, carpenters, machinists were there each exhibiting their varied arts as the columns moved onward towards the Crystal Palace, where, in the presence of ten thousand people, David Dudley Field, Esq., pronounced an oration. It was a most happy sight to see that venerable inventor, preacher and scholar, Dr. Nott, enjoying peaceful communication with his Grace the Archbishop Hughes, thus exhibiting a most agreeable illustration of the spirit of “peace on earth and good will among men,” such as is the promise of good things to come.

In the evening, there was a brilliant illumination and a gorgeous torchlight procession by the firemen, and, on the whole, no such display has been witnessed here since the first Hollander set his foot on Manhattan Island. The circumstances undoubtedly warranted some such exhibition of public feeling, although its keen relish was somewhat blunted in the estimation of many good men when they remembered the fact that it was got up and managed by a mess of swindling officials, who will in some manner make the taxpayers smart for the cotton, paint, liquor and cigars supplied on the occasion at their expense. We can somehow overlook the heartless part of the exhibition, when we consider this ovation as an acknowledgement due to that power of science which has enabled man to hold converse with his fellow man through the depths of the great sea, through that path spoken of by Job, “which no fowl knoweth, and which the vulture’s eye hath not seen; the lion’s whelps have not trodden it, nor the fierce lion passed by it.”

In regard to the operations of the enterprise, many superficial and incorrect statements have been put forth by various publications. No new invention of any great consequence was involved in laying the cable. Submarine cables had been laid before, but they were on a much smaller scale. The achievement derives its importance from its greatness, as being the most gigantic effort ever made to extend telegraphic communications between distant continents. Whether the Atlantic Cable will ever realize all that has been expected from it by sanguine persons remains to be demonstrated—thus far it has not. Its operations have, as yet, been of a very puzzling and tedious character. On page 184, Vol. XII., SCIENTIFIC AMERICAN, the nature of the submarine cable as an electrical conductor was explained. It was there stated to be a vast Leyden jar, and messages could not but travel very slow in it—requiring about six seconds for each signal, and therefore incapable of transmitting more than about half a column of news in twenty-four hours. As yet it has not come up to this figure; and it has baffled all efforts to work successfully any of our common telegraphic instruments. The messages sent have been by slow “time signals,” and many very incorrect and contradictory statements have been put forth by those interested, which are calculated to mislead the public. Thus in the published statement of G. Seward, manager of the line in England, he asserts that the Queen’s message to the President, consisting of ninety-nine words, was received in Newfoundland in sixty-seven seconds; whereas we know, by the published statement of M. de Santy, manager at Newfoundland, it took about twenty-four hours. All the messages—and they are but few in number—which have been sent, have required a very long time in their transmission. With the very best known instruments messages will be very slow, and unless some new discovery is made to remove existing obstacles, the Atlantic Telegraph will be of very little general benefit to the commercial people of the two continents. It will undoubtedly be a great national benefit for special purposes, but that will not meet the wants of the public. The instruments for operating the cable ought to have been adjusted and in working order long ago. That this has not been done affords reasonable grounds for concluding that greater difficulties have been experienced than were expected.

Relation of Masters and Apprentices.

We have often thought that if masters properly comprehended the relation they sustain to their apprentices and employees, their pecuniary interest would not only be greatly enhanced, but that a positive good would be rendered to every branch of industry in which they are engaged, as well through a more harmonious concert of action as a superior social elevation given to the worthy class under them. To our view, this relation is somewhat analogous to that existing between parents and children, so far as the development of their minds and the instilment of sound principles of morality and industry, the encouragement of skill in manipulation, and the attainment of knowledge are concerned. We believe the observation of a celebrated master, that no one is born without capacity for some branch of industry, is a just one, and that where stupidity exists it is nothing else but neglect of proper discipline and education in the youth of the person thus unfortunately deficient. To establish this fact it needs no fresh arguments of ours to show how extremely ductile, how capable of government and restraint, and how susceptible of instruction human nature is, when approached in the proper spirit of kindness, dignity and respect, which stimulates zeal and ambition, and produces a corresponding return.

The first duty of a master should be to present in himself an example for imitation in the elements of industry, morality, system, and the other attributes which constitute a

superior mechanic or workman. There are many apprentices who have so much of the spirit of self-reliance and genius that this example is not essentially necessary; but if we pursue the reflection, and for the certainty of the rule consider (what no man can fail to observe) the effect the characters of others of a superior rank have upon those immediately connected with them, it will be obvious to all that the master, in a great measure, impresses the inferior with the prominent traits of his character. They should, moreover, observe and study the dispositions and minds of their apprentices, with a view of conciliating their regard and confidence, and through this means to establish a free and familiar intercourse, and render the task of instruction and development more simple and easy. As the apprentices advance in knowledge and skill, suitable evidences of appreciation and encouragement should be given them. This will stimulate their ambition and exertion, and create among them a worthy spirit of emulation.

Where the character of an apprentice is such as to require a tight rein upon his actions, and the deprivation of privileges, and other suitable punishments for idleness and misconduct, care should be observed that these curbs and punishments do not descend into such acts of tyranny as will destroy the spirit and ambition of the youth, and render him obstinate, unruly, and beyond all future influences of excellence and good. Besides a thorough instruction in his trade or profession, and a sound and healthy education to otherwise render him fit for his social position in life, it should be the aim of a master to instil into his pupil all the scientific and other knowledge possible, even should such knowledge have no direct bearing upon the business or trade in which he is engaged. Such acts of interest, kindness, and confidence as these, and others of a corresponding character, cannot fail to produce the most marked beneficial results upon the interests of the master, and the happiness and condition of the grateful apprentice.

The Yellow Fever.

Some time ago we remonstrated strongly against the course of Dr. Thompson and the Board of Health of this city, for the careless manner in which infected ships were treated by them, and this journal was the first to call the public attention to their official stupidity in allowing the U. S. ship *Susquehanna* to remain for three months in the cool weather, without attempting to do anything for her restoration to usefulness, and then when the thermometer got to “fever heat,” they busily stirred themselves to get her disinfected, by risking the lives of stevedores and others, in a reckless and unnecessary manner. Since that time, many other infected ships have been treated in the same way, and at this moment there are too many opposite the Quarantine station, which is only six miles from the city. The consequence of this careless conduct is that yellow fever has broken out in three distinct parts of Staten Island.

Since writing the above, the whole of the Quarantine buildings have been burned to the ground by a mob, and the sick left uncared for. The doctors deserve the credit of having stuck to their posts like brave men during the whole of the conflagration. We hope that the perpetrators of the wrong may be apprehended and punished, for it is no way to redress one evil to allow a ruffianly gang to take the law into their own hands.

RECOVERY OF ELECTRIC CABLES.—The two electric cables which Mr. Brett endeavored in vain, about two years ago, to lay down between Spartiventi, Borea and Gallita, have, according to *Galignani’s Messenger*, been discovered, and taken on board an English steamer, which arrived at Elba a few weeks ago. From a casual observation, it appeared to be but slightly affected by abrasion and other causes to which it was subjected during its long residence in the mystic deep.

The Progress of Invention.

It is with pleasure that we commence this new volume with such a fine list of patents, issued during the past week; and we can congratulate the inventors of the country that gradually their noble mission is becoming appreciated, as is evidenced by the tribute now so generally bestowed upon those men of genius who have been engaged in laying the Ocean Cable. Perhaps no better evidence of the increasing interest felt in invention and the growing genius of our country can be found in the records of the Patent Office. We can state two facts which will show the rapid progress that has been made. During the year encompassed by Vol. XII of the SCIENTIFIC AMERICAN, 426 patents were issued to persons who had made their applications through our Agency, while in the year just closed, embraced within Vol. XIII, 888 patents were issued to our clients!

Making a selection from the List of Claims published in this first number of Vol. XIV., we find AGRICULTURE well represented, and we will proceed to give some idea of the new inventions in this class. In fact, the cultivation of the earth, and the production of machines which facilitate the tilling of the soil, and the gathering of its fruits, are the subjects which, more than any other, engage the inventor’s attention.

John D. Tifts, of Cuyahoga Falls, Ohio, has invented an improvement in separators or winnowers. It consists in having the discharge orifice of the fan case provided with a segment shell, by which the size of the orifice may be regulated as occasion may require, and using in connection with the slide an adjustable blast director, so that the device is well adapted to winnow large or small grain.

L. H. Parson and G. Houston, of Middletown, N. Y., have invented an improvement in the wire-toothed horse rake. They employ supplemental springs, arranged and connected with the teeth, so that while the teeth are properly braced and stayed, they have at the same time the requisite degree of elasticity.

Next comes an improved clearing device, to be applied to seed drills, invented by O. H. S. Brumfield, of Centerville, Ind. The invention consists in having a series of hooks or curved teeth attached to a rod, the ends of which are fitted in horizontal guides, and connected to pitmen, which are attached to cranks, these parts being so arranged as to clear all weeds and other obstructions from the ground in advance of the drill, and thus prevent its clogging.

Messrs. Conklin & Newton, of Stirling, Ill., have produced a novel seed-distributing device, especially applicable to broadcast seed planters.

J. B. McCormick, of Versailles, Ky., and W. R. Baker, of Boston, Mass., have invented an improvement in seeding machines, which relates to a novel means employed for forming the drills or furrows, and dropping the seed into the ground.

The next invention, that of E. L. Lyon, of East Randolph, N. Y., relates to an improvement in that class of seeding machines in which the seed-distributing devices are attached to the wheels, and are operated by the rotation of the wheels as the machine is drawn along. The invention consists in the peculiar construction and arrangement of the distributing devices as applied to the wheels, so that seed may be planted evenly either in check rows or in parallel drills.

Joseph D. Smith, of Lancaster, Ohio, has also invented a machine for planting maize, or corn, and other seed, in check rows. The invention consists in a peculiar seed-distributing device, and also in a novel device for forming the necessary furrows to receive the seed also in a peculiar arrangement of the framing, whereby the device is allowed to conform to the inequalities of the ground, and the seed-distributing portion elevated free from the ground, when desired, or when mov-

ing from place to place, or in turning at the ends of rows, &c.

And last, but not least, W. A. Mahaffy, of Carimona, Minn., has made an improvement in the seed-distributing device of seeding machines, whereby the seed is discharged in measured quantities from the seed box, and conveyed from thence to the conveying tubes at the bottom of which the furrow teeth are formed, the seed being deposited in the furrows in quantities precisely the same as they are discharged from the seed box.

In STEAM apparatus and appliances we notice the steam cock invented by Albert Fuller, of Cincinnati, Ohio, which is composed of a plug of rubber or other suitable elastic material, placed on the valve stem, and fitted between a metallic shield on one side and a metallic cap on the other, the cap having a nut bearing against it. By these means due provision is made to compensate for the wearing of the plug, and the casualty of the forcing of the plug through the valve seat by the pressure of the steam effectually guarded against.

J. H. Winn, of Portage, Wis., has invented an improved apparatus constituting a combined safety valve and steam pressure gage, which consists in a very simple method of applying and arranging one or more weighted pendulous rods, and an index and dial in combination with a piston valve and suitable arrangement of steam passages, whereby the escape of steam from a boiler, as soon as it arrives at any desired pressure, is provided for, and any pressure of steam below that at which it is desired to escape, is correctly indicated by the index on the dial.

Travelers, emigrants, and in fact every one who ever has had to travel in a railway train by night, and who knows the uncomfortable-ness of a night journey—how the cars rocked, but allowed no sleep—how you tried to make yourself comfortable, and could not—all who have experienced the inconvenience will thank J. C. Dewitt, of West Bloomfield, N. J., K. Freeman, of Fond du Lac, Wis., and W. Painter, of Wilmington, Del., because each of these inventors has invented a method of arranging seats, and other parts of railway cars, so that without taking away any often necessary room in daytime, they can in a few moments be made into sleeping cars, giving a good bed or berth to as many as were seated. We cannot explain them without engravings, but each has some special feature to commend it to a favorable reception by the railroad companies and traveling public.

Among those inventions which may be said to promote DOMESTIC ECONOMY we see many useful improvements. First we may notice the lamp invented by James P. and Ellen Kenyon, of Brooklyn, N. Y. It is especially adapted for burning coal oils or other hydrocarbons, and as these contain variable quantities (according to their purity) of carbon and hydrogen, they require a greater or less supply of air to the flame. To obtain this exact quantity with little trouble, two wicks in separate collapsible wick tubes are employed, and placed at such an angle that their flames meet and join together, while between them a current of air is supplied to support combustion. Outside these wick tubes is a cap or cover, by raising which the wick tubes separate, and consequently more air passes up to feed the flame, and by depressing the cap they are brought closer together, and less air passes up between them. By lighting the lamp and moving this cap up and down, any one can regulate the amount of air which will fully consume the particular quality of oil then in the lamp, and consequently there is no smoke, and no necessity for a chimney, or any artificial draft creator.

G. W. Smith, of Aurora, Ind., has invented a foot-warmer for forges, which is a chamber or box placed in the ground, or below the flooring adjoining the forge, and the place where the workman usually stands. This box is supplied with steam generated in a water tweek, if such tweek be used, or if not, a tank

is inserted in the wall of the forge, so that steam may be generated in it, and supplied to the foot-warmer.

J. H. Roome, of New York, has made an improvement in tailors' and other shears, by forming the handle and upper cutting blade of the shears in two parts, and so connecting the former to the body or shank of the lower cutting blade and to the upper one as to enable the leverage exerted by the thumb to be gradually increased with the closing of the blades.

A. W. Hale, of New Britain, Conn., has invented an improvement in portable pressure bells for house use. It consists in the employment of a vertical sliding arbor, which works through the center of the shell of the bell, said arbor having a pin projecting horizontally from it, and also having a spiral spring placed around it, the above parts being used in connection with a spring or elastic tongue, provided with a projecting plate, so that a very simple device is obtained for sounding the bell by simply depressing the arbor.

A simple, cheap, and efficient coffee-roaster has been invented by Samuel Tower, of Grand Rapids, Mich. It is simply two hollow hemispheres of metal, which, fitting together, form a spheroidal or spherical chamber, in which the coffee is placed to be roasted. The axle on which it is rotated forms a lock to keep the two parts together, and it is equally applicable for household or manufacturers use.

The ladies have lately given much employment to inventive genius, and the ingenuity of many inventors has expanded in direct proportion with the size of those much abused but graceful additions to the female form—the hoops. A. Smart, of New York, has invented an improved metallic clasp for securing the hoops to the tapes of skeleton skirts. This clasp is a small plate of metal secured to the hoop, and the tape passes through slits in the back, and is there held secure. It is simple and convenient, doing away with all knots, and other annoyances.

A. G. Davis, of Watertown, Conn., has invented a new parasol and sun umbrella. The invention consists in having the handle of the parasol, sun shade, or sun umbrella formed of two parts, one part being fitted into and allowed to slide in and out from the other, and used in connection with a stop and pressure bar, slide ferrule, and hub, the whole being arranged so that the handle may be extended or shortened as the implement is opened, and shortened as it is closed or folded.

J. T. B. Rogers, of New York (assignor to G. B. Sloat, of Philadelphia, Pa.), has invented a new device for producing tension on the needle thread of sewing machines. The invention consists of two conical surfaces, one of which is concave, and forms a cap to the other, which is convex, and an adjusting screw and spring, the whole being combined to produce upon the thread passing between the cones, friction, which is sufficiently variable to produce a degree of tension on the thread that can be regulated with extreme delicacy.

John Agnew, of Columbia, S. C., has invented an improved coupling for securing together the ends of metal bale hoops, which consists in having a small metal casting with a longitudinal slit in it, of double taper form, and having the ends of the hoops doubled, or bent over in loop form, so that the same may bind or become wedged in the casting, forming a perfect fastening.

William Todd, of Cherryfield, Me., has invented a combination of rollers, placed at such an obtuse angle with each other, and a tapering roller placed beside them, so that pieces of lumber may be rolled on to them and guided to the tapering roller without regard to the position of the log. It is intended to facilitate the piling, removal or stowage of logs or lumber.

Issachar A. Hansell, of Springfield, Ill., has produced a drawing-board for perspective drawing. It has an adjustable curved strip fitted in each side of the board, the outer

edges of the strips being curved parts and forming guides for the square, the curves being struck or formed from the vanishing point or points of distance of the object to be drawn, and determining the proper angle at any point of their curved surface for the vanishing lines. The board has also straight guides at each side in order that the square, when required, may be adjusted parallel with the base of the board.

Jeremiah Howard, of New York, has made an improvement in mills for crushing sugarcane, which consists in applying, by suitable means, hydraulic pressure to the lower roller of a crushing mill, so that the rollers will be allowed to yield or give, and the space between them and the upper rollers be regulated according to the work to be performed.

An invention which has long been wanted, is supplied by A. Pearsall, of Nashville, Tenn., who employs an inclined mandrel, clamps and welding roller, arranged so that in the machine, bellows' pipes and nozzles may be closed and welded in a very expeditious and perfect manner.

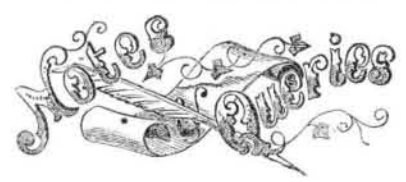
The carding machine has received some improvement from C. E. Price and J. Haythorn, of Thompsonville, Conn. The invention consists in the employment of a revolving spirally-grooved or threaded cylinder, applied below the comb which removes the fleece from the doffer, and near to and parallel with the doffer, for the purpose of receiving the fleece as it is struck from the doffer by the comb, and conveying the same away by means of its revolution, in a direction parallel with the axis of the doffer, through a tube arranged at one side of the machine. By this contrivance they are enabled to produce a better quality of yarn from stock of given quality, and make very little waste.

In making carriages more comfortable, and providing for the safety of persons who take the easy exercise of carriage riding, we notice two inventions. The first is a carriage bow prop invented by D. B. Wright and L. Sawyer, of Amesburg, Mass., the object of which is to obviate the difficulty attending the present mode of attaching props to carriage bows. By the present mode of attachment the leather or covering of the top is not allowed to work or move around the prop, and consequently it is liable to wrinkle, as the braces or rods which the props support are moved, and the top raised and lowered. The usual strain, also, to which the leather is subjected, is avoided, and the improvement makes a better finish, adding considerably to the appearance of calash tops, and also allows mechanics better facilities for finishing or "binding off" the top.

John C. Dewitt, of West Bloomfield, N. J., has invented a new buckle for securing harness traces and hame tugs, the object of which is to obtain a buckle or fastening for securing the traces of harnesses to their hame tugs without injuring the traces as is the case with the ordinary buckle, and at the same time to obtain also a fastening that will admit of a ready adjustment and form a sure connection.

Here we must stop, and yet there are many other valuable inventions in this week's List of Claims which we must, from want of space, omit to notice, but we have at any rate shown a sufficient number to demonstrate the wide range that invention takes, and to prove the progress of mechanical science.

PUBLIC FOUNTAINS.—The citizens of Birmingham, Eng., not having spent all the money which they appropriated for the reception of Queen Victoria in their city, have devoted the surplus to the erection of public fountains. Why cannot all our cities imitate Philadelphia, Liverpool, Paris and other cities, in this, and provide plenty of fountains, to gush forth cooling water, to cheer and improve the thirsty, weary inhabitants? We are forcibly impressed with the statement that the money appropriated was not all expended. No such libel as this has ever been charged against the managers of similar affairs in this city.



*. PERSONS who write to us, expecting replies through this column, and those who may desire to make contributions to it of brief interesting facts, must always observe the strict rule, viz., to furnish their names, otherwise we cannot place confidence in their communications.

MULTUM IN PARVO.—In 1630, David Ramsey, the King's Poet, took out a patent in England, No. 63, embracing the following points:—First, To multiply and make saltpetre in an open field, in four acres of ground, sufficient to serve in his Majesty's dominions. Second, To raise water from low pits by fire. Third, To make any sorts of mills to go on standing water by continual motion, without the help of winds, weight or horse. Fourth, To make all sorts of tapestry without any weaving loom or way ever yet in use in this kingdom. Fifth, To make boats, ships and barges go against wind and tide. Sixth, To make the earth fertile more than usual. Seventh, To raise water in a new way. Eighth, To make hard from soft and copper to be tough and soft, and to make yellow wax white very speedily.

W. W. H., of Texas.—The conical ball, with the charge in a hollow at the rear, as described in the New Orleans Delta as a Russian improvement, is not new. Such balls have been used in the United States.

TUBULAR AIR RAILWAY.—S. T., of Philadelphia, inquires: "Was there not a patent issued a few years since for the transmission of mails through pipes by atmospheric pressure? Has it been abandoned, or is the inventor still sanguine of success?" The idea referred to for carrying mails is old, but a patent was issued a few years since for an improved mode of accomplishing the object. The invention was illustrated and described on page 265, Vol. VIII, Sci. Am. We believe the inventor—I. S. Richardson, of Boston,—is still sanguine of success.

ALL ABOUT A SNUFF BOX.—The original inventor of the Ayreshire snuff boxes, so well-known in Great Britain, was a cripple, hardly possessing the power of locomotion. They are made of wood, admirably joined, painted and varnished, and were first manufactured about sixty years since. Instead of taking out a patent, the inventor intrusted his secret to a joiner in the village, who in a few years amassed a great fortune, while the other died as he had lived, in the greatest poverty. Speaking of snuff-boxes, snuff-taking took its rise in England in 1702.

CURIOSITY.—The popular belief that young birds are assisted in escaping from the shell by the parent, is refuted by a talented author. The beak of the chicken is tipped with a bony point; this is protruded through the shell, and afterwards drops off. By means of its feet as levers, the animal turns itself little by little, till by degrees the whole top of the large end of the egg is cut cleanly off, and thus the prisoner is set free.

J. C. S., of Mass.—Your communication of the 28th ult. is placed among our private files. If you go on at this rate there will soon be nothing remaining undiscovered in the projectiles for efficient manslaughter.

T. M., of Va.—Messrs. Phelps, Dodge & Co., of this city, are extensive importers and dealers in tin plate. This firm is very reliable, and you can safely remit money to them.

A. H. G., of Vt.—If a straw cutter, a washing machine, a saw, a coffee mill, &c., are all arranged to be operated by a single shaft, such combination could not be patented. Each of these machines would fulfil its appropriate function independently of the other, therefore there is no proper combination. To make the matter plain, the coffee mill could do its grinding without the aid of the washing machines.

TELEGRAPHS.—A Philadelphia correspondent inquires if Franklin did not invent the first electric telegraph, "he having sent an electric current through the Schuylkill river, and made signals in 1748, thus demonstrating that electric messages could be sent great distances nearly a hundred years before Professor Morse invented his telegraph (1835)." Franklin accomplished the result mentioned by our correspondent, but a like effect had been produced in 1729 by Messrs. Wheeler and Grey, in England. The electricity which they employed was frictional, and could not be successfully applied to public telegraphing. Voltaic electricity was not then discovered. The application of electricity to telegraphing was essayed by various persons long before Professor Morse invented his telegraph; but his invention is entirely different from all his predecessors. He did for the telegraph what Watt did for the steam engine, and he put up the first really successful line of public telegraph (in 1844) in our country.

CLOCKS.—A correspondent in Cincinnati inquires: "where were clocks first made in America; and how have Yankee clocks gained such a world-wide reputation?" We cannot answer the first question positively, but clocks were manufactured at a very early date in Hartford and Litchfield, Conn. A patent was granted to Benjamin Hanks, of Litchfield, in 1783, for a self-winding clock, and at that period the wooden timepieces of New England had acquired a high character. Their works were made of well-seasoned wood, carefully finished, and they kept accurate time. At an early date Philadelphia had also acquired a high character for clock-making; and some years before the Revolution, the celebrated David Rittenhouse, of that city, made calendar clocks which gained him the praise of the most skillful mechanics in Europe.

C. C., of Texas.—We do not profess the practice of physic, nor do we take diagnosis of diseases—these offices belong to the professional physician; but we can tell you how to prepare a liniment that may be useful in removing your rheumatic pains.—Take one pint of brady (we don't mean the stuff commonly sold as