has a conical depression in its lower face to engage with a corresponding projection on the follower, E. The form of the latter is clearly shown with that of the other detached portions in Fig. 2, while Fig. 1 represents the apparatus set up.

The material to be pressed is placed between the perforated bottom, on B, and the follower. By suitably turning the screw, the latter is carried down, squeezing the contents of the press, the juice or liquor escaping as already noted. It is claimed, in addition to the advantages already referred to, that, by the use of a follower with a conical bearing in the nut, and guided by the central tube, a more even and level bearing on the mass to be pressed is obtained than can be got by the ordinary screw press. After the liquid has been expelled, the cake may be removed by lifting the central tube, B, which brings the mass out with it, and from which the latter can be easily broken away.

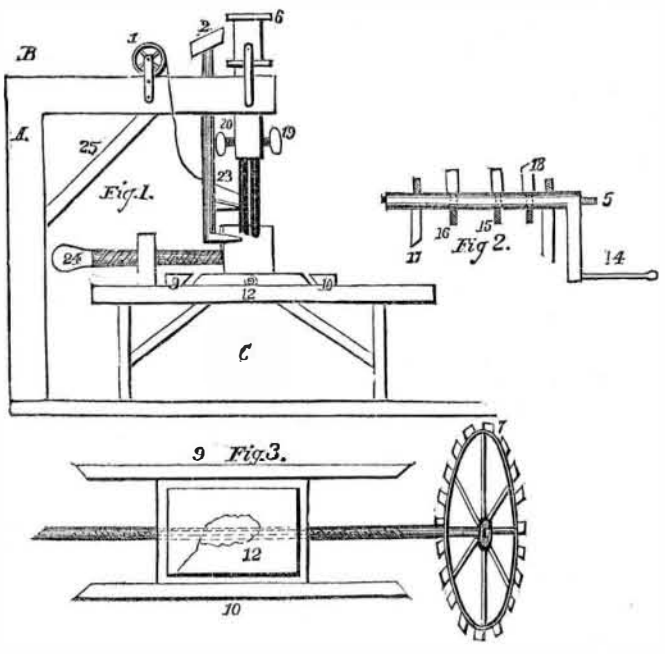
The inventor informs us that the apparatus is well adapted for pressing fruit used in the manufacture of wines, cider, and jellies, and also for dairy purposes in compressing cheese and butter.

Patented September 2, 1873. For further particulars regarding sale of patent rights, address Mr. Joseph Harlan, Lexington, Scott county, Ind.

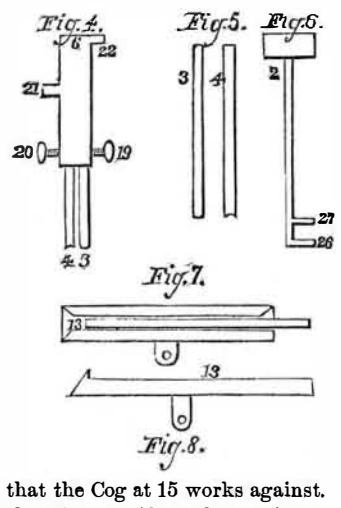
THAT ANCIENT SEWING MACHINE.

We referred, in a recent issue, to the discovery of an old sewing machine patent among the records of the British Patent Office, which, for a short time past, has excited considerable interest in mechanical circles. We present herewith engravings of the drawing attached to the specification. The latter we give below verbatim. The patent was granted to Thomas Saint (cabinet maker) on July 17, 1790, for "An entire new method of making and completing shoes, boots, spatterdashes, clogs, and other articles, by means of tools or machines, also invented by me for that purpose, and of certain compositions of the nature of japan or varnish, which will be very advantageous in many useful applications." It is numbered 1,764, and dated July 17, 1790.

The specifications describe three separate machines; the first a rather primitive contrivance for spinning and doubling the thread, the third for plaiting and weaving, and the second for "stitching, quilting or sewing." The last mentioned is the device represented, which is described as follows: A B C is the frame. Fig. 1 is the reel for the thread. 2 is a spindle which, moving to the right, conveys the thread to the needle at 4, and moving to the left again takes hold of



the stitch and keeps it tight till the needle has brought another stitch through the last taken; and so it goes on alternately until the whole article is completely stitched. 3 is the awl that makes the holes for the needle to pass through. 5 is a spindle that goes through the poppet at 6; while by turning the spindle at 5, the awl and needle is worked by the cogs 15 and 16, which are in the spindle at 5; and the motion of this spindle gives motion to the prongs 26 and 27, which are in the spindle at 2. 14 is a cog that gives motion to the wheel 7, which gives motion to a slide at 12 which moves along the grooves at 9 and 10 by means of a screw that is fixed in the wheel, to which slide the article is fixed for stitching. The prong 26 goes into a hole at the slide 13 and gives motion to it "which draws the thread on the under side of the article and holds it tight till the next stitch is taken, and so on till it is done. 22 in Fig. 6 is a shoulder that the Cog at 15 works against. At 21 is a shoulder that the Cog at 16 works against; these work (in?) the Poppet at 6. 19 and 20 are two screws to fasten the Awl and Needle 3 and 4: in 23 is the thread passing in between the Awl and Needle which the eye of the Needle receiveth. 24 is a screw to regulate the distance from the edge or side of



the article you are stitching. 25 is a Brace or support to the top of the Machine. The Cogs 14, 15, 16, 17 and 18 in the Spindle at 5 should be so fastened as to be screwed up or down according to the quality of the article and fineness or coarseness of the stitching required."

The machine was destined for use in sewing together outside and inner soles of shoes, and for joining legs, spatterdashes, etc. It seems quite certain that there was no eye-pointed needle, but that the lower end of this implement, which appears to be fractured, is meant to be notched in order to push the thread through the work.

Correspondence.

Crude Oil for Fuel.

To the Editor of the Scientific American:

In your issue of October 4, in an article on the combustion of petroleum as fuel and for manufacturing gas, you set forth that the best result of combustion of petroleum as compared with coal was as 2 to 3. Now Mr. Daniel Fisher, at Fisher Brothers' storage tanks in Oil City, Pa., has a burner in operation that he has used since last winter continuously. He uses from one barrel and one half to one barrel and three quarters during the run of ten hours, using in the same time one tun of coal. He uses steam as a motive power, throwing a jet of oil into a chamber, thence through a small opening in the chamber to the furnace, the jet being accompanied by a current of air, fed in connection with the oil, of such quantity to make perfect combustion, there being no smoke. Mr. Fisher has not patented his invention, nor does he propose to. A. L. S.

REMARKS BY THE EDITOR.—The idea intended to be here conveyed is, we presume, that 74 gallons of crude petroleum, or 518 lbs., is made by means of Mr. Fisher's apparatus to generate as much steam power as a tun of coal. There is evidently a mistake somewhere. The power of the engine is not stated, and therefore we cannot judge of the economy of the fuel. But we may observe that, if the engine and boiler are well made and intelligently run, then two pounds of coal per horse power per hour would be consumed, on which basis a tun of coal would drive a steam engine of 112 horse power for one day of ten hours, and it would require 1,494 lbs., or 5 barrels, of petroleum to do the same work.

The Hot Air Engine.

To the Editor of the Scientific American:

I have read with much interest the suggestions lately made by the different correspondents for the improvement of the hot air engine. I have had the care of a caloric engine for almost two years. It is of 2½ horse power. I am troubled to keep the upper door and also the poppet valves tight. I would throw out two suggestions that I think would make them better as far as valves and doors are concerned, they are these: Have the door seats cast separately from the engine, and have them fastened to it by a flange around the seat, with bolts screwing into the engine; the door and seat could then be easily taken from the engine and planed or ground together as the case might require. As they now are, it is a vexing tedious job to grind them to a surface by hand, and the change might sometimes save the removal of the whole furnace to a shop for repairs.

I think that the poppet valves would be better if they were made somewhat like a cone, having the same bearing surface as those in use at the present time; this would make them less liable to warp, they would be more quickly ground together if they leaked, and by no possible means could anything lodge on the valves or seat. Sometimes we have had the engine nearly stopped by small lumps of coal catching between the valve and seat; and at others it bothers me to start it for the same reason. FRANK O. CLARK.

Illuminating Gas from Crude Petroleum.

To the Editor of the Scientific American:

As you are happy to chronicle any new facts, let me make a statement of what has been done at our mill at Passaic, N. J., since January, 1871, when we had works erected for us, by Dr. W. C. Wren, of Brooklyn, N. Y., for the manufacture of illuminating and heating gas from crude petroleum. The works are the invention of Dr. Wren, and we have ever since been using them to light our mill (which we run all night) with the following results:

First, we use crude petroleum (which is quoted at 6 cents per gallon) and make a fixed permanent gas of eighty candle power. Secondly, we have no difficulty in making the gas. Thirdly, we make, on an average, more than four thousand feet of gas of the above candle power from one barrel of crude oil, which we use through a burner consuming one foot per hour and one foot and three tenths per hour. The barrel of crude petroleum, at the rate of ten cents per gallon, costs us, when made into gas, seven dollars; that is, in practice it costs us seven dollars for four thousand feet of petroleum gas that goes farther and gives us a better light than seventy dollars worth of coal gas at three dollars and a half per thousand. The above is the result in actual practice.

If we used coal gas, we would want five feet and six feet burners for the same light we now get with a one foot and a one and three tenths feet burner. We have now had the works in steady and constant use for more than two years and a half. This is no "statement of the inventor," but plain indisputable fact by a consumer.

The retort for making the gas is a simple contrivance, and is not given to choking with carbon, as you seem to think probable. It is so simple and easy to run that we take any man out of the mill and set him at it.

At some future time (not to use more of your space at present) I will give you some of the results of heating with petroleum gas. MILES WATERHOUSE, Superintendent.

52 and 54 Murray Street, New York city.

REMARKS BY THE EDITOR.—We are glad to make public the excellent practical results here given for the Wren process, which is evidently a discovery of much importance. The apparatus employed involves, we believe, the employment of a series of chambered retorts, through which the oil is slowly passed.

Strange Lightning Freak.

To the Editor of the Scientific American:

About twenty miles east of Santa Fé lay the remains of an ancient Indian city. The church (which is, or was ten years ago, complete) has been so much appropriated by the neighbors that the roof has caved in and only the outer walls are now standing, In one corner, near a tower, a ten year old boy recently took refuge from a thunderstorm. The lightning struck the north side of the tower, tearing the adobes, of which the church is built, for about three feet downward; it then went inside the wall (how cannot be seen) and came out again through the wall of the church, as is shown by an aperture, at the hight of the boy's head. His hat shows a large hole; and when his father found him, he showed no sign of life, his eyes were open and his arms *a kimbo*, as if calmly awaiting for the storm to pass. His outer garments are entire; but his shirt is somewhat torn on the back and his drawers are ripped down the left leg. Some scientific travelers advised the father to break into the wall, as they believe that metal inside attracted the lightning and caused this irregular course. He tried and found that there is, inside, a separate wall, apparently built after the original wall was finished, the entire being five feet thick.

About two centuries ago, the Indians had troubles with Spain, and closed up their wells and mines, and left. It is possible that the priests at that time secreted their precious metals in masonry. This will soon be found out; but this is one step more to destroy the remains of strange early civilization in America; and moreover, the Indians (Montezumas) are fast dying out. L. G. FELLNER.

San Cristoval, New Mexico.

The Bisulphide Auxiliary Engine.

To the Editor of the Scientific American:

Your correspondent, Mr. Joel A. H. Ellis, does himself and his engine great injustice when he says that in it "the heat is used twice;" and this is no mere question of words, for he implies that his machine is a kind of perpetual motion, and leads one to ask why, if the heat can be used twice, may it not in some similar way be used three or an indefinite number of times. Such a statement is calculated to bring into disrepute a really meritorious thing, and is productive of distrust and suspicion in the minds of power users.

The celebrated professor, the late W. J. Macquorn Rankine, has shown indisputably that the efficiency of any heat engine is in a certain way proportional to the difference of the temperatures at which the steam, or other heat vehicle, is admitted to and ejected from the machine. In a condensing steam engine, for instance, the greater the difference between the temperature of the steam in the boiler and that in the condenser, the greater the efficiency of the engine; and, disregarding the question of heating feed water and other economic adjuncts of the steam engine, by continuing the reduction of temperature from that of the exhaust steam in a non-condensing engine to that of the bisulphide condenser, Mr. Ellis has a heat engine, considering it as a whole, working between much greater extremes of temperature than is possible with either the steam or bisulphide engine alone.

With our present light on thermo-dynamics, he may say that, in the steam engine alone a certain quantity of the potential energy, resident in the steam and called heat, is transmuted into external work, and that his bisulphide addition transmutes a quantity of the energy remaining in the exhaust steam into equally useful work; but not that he has used the heat of the steam twice. He transmutes into useful work or uses more of the heat imparted to the water in the steam boiler than can be done with the steam engine alone, but he does not use any of it twice; and a very large proportion of it he does not even use once. JOHN T. HAWKINS.

New York city.

A White Blackbird.

To the Editor of the Scientific American:

It will give the ornithological world some pleasure to learn that another *rara avis* has been added to its collections. This is none other than a "white blackbird" or, more properly speaking, a "red winged starling." It was secured by Mr. E. A. Andrews, of Watertown, N. Y. While Fayette Noble, of Ellisburg, was "sitting" this gentleman for ducks on the marsh at the mouth of Sandy Creek Landing, Mr. Noble discovered a "white blackbird" amid the thousands of starlings that frequent that marsh. Of course such an object could not fail to attract attention and by dint of careful paddling, Mr. Andrews was at length placed in a position to secure this rare prize. The bird, as we have said, is of the red winged variety, a fledgling of this year, with cream colored feathers interspersed here and there throughout its snowy coat, the cream color predominating especially on the wing, where in another year the red would appear. It is unnecessary to say that the bird was a great curiosity. The oldest hunters on the marsh, who have seen myriads

of blackbirds, as they call them, come and go, never saw such a thing as a white one before. The appearance of this anomalous bird, as he arose and settled amid his companions of a darker hue, was very striking, they seeming to care no more for him than if he were one of their own color.

BIRD LOVER.

[Rev. A. H. Gesner, of Sing Sing, N. Y., states that he had this bird in his hand.—EDS.]

LETTER FROM UNITED STATES COMMISSIONER PROFESSOR R. H. THURSTON.

NUMBER 15.

PARIS, September, 1873.

LIEGE,

Belgium, and the surrounding country is by far the busiest district that we have yet visited on the continent. The city is quite large, having a population of about 120,000, and has been called

THE BIRMINGHAM OF BELGIUM.

En route to Brussels, our road took us through a wonderfully active country, and we were continually called to look at the smoky, clustering villages, situated in pleasant and romantic spots among the hills, blots upon beautiful landscapes; yet such defects have made this little domain the most successful and prosperous portion of Europe.

The manufacturers of Belgium have a history dating back as far as the Roman occupation of Northwestern Europe at the commencement of the Christian era. The energy and courage, which then won from the great Cæsar a respect which was accorded to few other tribes, has never been lost, and has developed itself splendidly in gaining victories of peace. The character of the work done in Belgium is better, as a rule, than is found in any other country of Europe, and is second only to that done in England. In some cases, Belgian manufacturers of machinery have even successfully competed in England with British builders. The country produces its own flax, and textiles are produced from it of the best quality. Cotton and wool are largely imported, and, in some branches, the manufactures of these staples are carried on with greater success than in any other part of the world. The best machinery, however, is usually purchased in England, and the superintendents of mills are frequently imported. The manufactures in iron have an antiquity which antedates history. The Romans are supposed to have found rude forges and furnaces in operation, and vast cinder heaps are found here and there which testify to the extent, as well as the early date, of the transition in Belgium from the age of stone and brass to that of iron; and the method of working has been learned also by the discovery, at Lustin, about three years ago, of two

ANCIENT SMELTING FURNACES,

with their contents just as they were when they went out of blast two thousand years ago. They were merely excavations in the clay, oval in form, some twelve feet long and a yard in depth. No artificial blast was used, but a long channel, opening toward the quarter from whence blew the strongest winds, served to direct the air supply into the lower part of the furnaces. The result was the reduction of the ore without carbonization, the product being a crude sort of wrought iron. The iron, found in the furnaces just referred to, contained nearly 95 per cent of pure iron, the remainder consisting of a variety of generally injurious impurities.

From that time to the present, the Flemings have never lost their skill as workers in iron, and they have succeeded well in keeping pace with the progress of improvement. To-day, we are told that Liège possesses 98 iron works, turning out, in 1872, 178,000 tuns of pig metal and 103,000 tuns of finished iron. Charleroi threw into market 400,000 tuns of pig and 250,000 tuns of manufactured iron. Verviers, where was built the Thompson road locomotive exhibited at Vienna by Bede & Co., Seraing, where is the establishment of the Cockerill company, Ghent, Brussels and Antwerp and many other towns are well worth visiting, but we had not time to explore other cells of this busy hive of the Flamands.

Had the Belgians the steadiness and persistence of the English workman, or the energy and activity of the American, this little kingdom would become a most formidable industrial rival to all its neighbors. As it is, the people have nobly illustrated their national motto "*L'Union fait la Force*;" and by industry and frugality, and by close attention to their pursuits, whether of commerce or of manufactures, have converted their once unproductive fields into a vast and beautiful garden, have turned their mineral resources into national wealth, and have built up beautiful towns and magnificent cities in every district of their State. The whole country has an area of but eleven thousand square miles, just the area of the State of Maryland; yet Flanders produces eight millions of dollars worth of flax, Hainault raises two millions of tuns of coal, and cotton manufacturing employs some fifteen millions of dollars of capital. Brussels and Mechlin lace, Ghent calicoes, Tournay carpets, the paper and the firearms of Liège, and the more important branches of iron working already considered, have been as useful in stimulating commerce as in directly contributing to the national prosperity.

The work people are not usually as well provided with the comforts and conveniences of life as they should be, but instances are not infrequent of employers making special provision for their welfare in a degree which is not actually incumbent upon them. I am very confident, however, that in no instance, at home or abroad, does the employer fail ultimately to receive a bountiful return for all capiatl expended in providing for the physical, intellectual and moral welfare of his employees. Physical benefits conferred bring back a return in healthful energy, intellectual training gives intelligence which invariably finds application, and moral advancement results in an increased sense of responsibility; and all together promote wonderfully that appreciation of the mutual obligations binding master and man which is the best of all preventives of strikes and lock-outs, and of all those unfortunate disagreements which divert the trades unions from their legitimate work and bring embarrassment and distress upon all classes. The Messrs. D'Andrimont have erected, at their collieries at Micheraux, the

HOTEL LOUISE

for their work people. The house contains 200 beds, the rooms are fitted up plainly but neatly, with all modern conveniences, and the prices charged are as slight an advance upon cost as will secure the proprietors against absolute loss. Each man pays about a franc and a half (thirty cents) per day for lodging, meals, washing and necessary attendance. A miner, returning from work, goes to the lavatory, removes his begrimed suit of clothes, sends them down by a "dumb waiter" to the laundry, takes his bath, receives a clean suit of his own clothes in return for those sent down, and makes his appearance ready for his meal, or for cleanly occupation during his "off watch," dressed very like a gentleman, and, with his neat suit and freshly blacked boots, experiences a feeling of self respect rarely known under the ordinary *régime* of less well administered coal mines.

Here the maximum earnings of a miner are given as about ninety francs (eighteen dollars) in a month, one half of which might have been saved by a frugal single man. In the

COTTON AND WOOLEN MILLS,

as well as in many other branches of industry, the work people labor generally seventy-two hours per week, and no abatement of time is made for women and children, in which classes thirty-five per cent and twenty-five per cent, respectively, of the working population are included. In some cases, the working hours have been reduced to ten, and that without decrease of production. The amount of work done by each hand probably averages less than with us, although the speeds of machinery are about up to our standard. Thus, cotton looms run 125 to 180 picks per minute, woolen 140 or 150, and sometimes at higher speeds. Cotton spindles are driven up to 6,000 revolutions on American and 5,000 on East Indian cotton, woolen spindles make 5,000 or 5,500, and flax spindles 3,500 turns per minute. The number of operatives varies from seven to ten per thousand spindles, a number exceeding the figures of our own and English mills. Some of these mills contain 200,000 spindles, and the tendency is, as with us, continually toward increasing the size of mills, and securing the increase of economy which is a usual consequence of enlarged production. That sound business policy which dictates the purchase of the best possible machinery is also well understood there, and the less frequently acknowledged principle that prosperity always ultimately attends honest work and liberal dealing is, perhaps, more generally recognized than among many other manufacturing peoples.

A pleasant afternoon ride from Liège through a very busy country, during which we were rarely beyond the sound of the armorer's hammer or the hum of spindles, was terminated, toward evening, by our arrival in

BRUSSELS,

a favorite city with travelers, who can usually second the encomiums of Byron, of Scott and of Southey, who were enthusiastic in their admiration.

We had but little time to spare, and could not even find opportunity to call upon our distinguished friend and colleague, M. Le Professeur Lambert, who, some years ago, so intelligently examined the resources and studied the industries of the United States, under the direction of his government. We were more fortunate in the attempt to meet the "friend of excursionists," Mr. Cook, from whom we learned that the party of circumnavigators of the world, who are to trust their fortunes in the hands of his guides, is composed principally of Americans. "*Natürlich*," his German assistant remarked, and the French attendant added: "*parfaitement*." Brussels is indeed a noble city, and we regretted very much that we had not time to explore it more thoroughly, and especially to visit the galleries of paintings for which it is famous, and in which so many of our artists find instruction and inspiration. However, as an uncultivated taste has caused me to prefer the paintings of Titian to those of Rubens, and the masterpieces of Correggio to the *chefs d'œuvres* of Raffaelle, this disappointment may have been, in some degree, deserved.

The pleasant streets, the noble old cathedral, the beautiful Hotel de Ville with its odd sculptures and tall, graceful spire, and the magnificent, but still unfinished, Bourse, which we thought the noblest modern structure which we had yet seen in Europe, all delighted us, and we came away most reluctantly, but with the hope that we may see more of this "junior Paris" at some future time.

We left Brussels by the evening express train and arrived here early next morning. We had not a comfortable ride, for the French railway carriages are not as comfortably cushioned nor as nicely upholstered as those of Germany and Austria. They were in this train nearly as meanly fitted up as the general run of English cars. Reaching Paris at an early hour this morning, we enjoyed greatly the ride to our hotel through the clean streets, already enlivened by crowds of working people on their way to commence their tasks, the clear fresh air giving every one a cheerful humor and a brisk manner that was quite inspiriting.

During the short period of our stop here, we have had opportunities of visiting the more interesting portions of the city and of inspecting the principal edifices. We have visited

NOTRE DAME,

and have admired its architecture and wondered at the strange taste which could have placed above its galleries and on the towers the ugly carved monsters which were probably once supposed to add to the beauty of the venerable pile. In their presence, it is easy to imagine Quasimodo. We have looked upon the tomb of Napoleon Bonaparte, at the Invalides, and, with less of interest, perhaps, but with greater pleasure, have explored the Pantheon, where lesser heroes but greater men are interred. We have admired the Madeleine and the beautiful little Sainte Chapelle, and have viewed the new Opera House from every accessible standpoint. We have enjoyed the "*Concerts des Ambassadeurs*" in the Elysian Fields and have stood in half pleased, half sad admiration within the structure which contains the beautifully executed and wonderfully well designed panorama of Paris during the siege. The spectator is almost convinced as he gazes upon this splendid picture, that he is actually upon the battle field before Paris, so perfectly do the art of the painter and the scenic arrangement combine to deceive him. We have been courteously received at the Ecole des Mines and at the Ponts et Chaussées, and have examined their collections and studied their methods, and have been, in defiance of regulation, shown through the rough looking halls, lecture rooms and dormitories of the famous Polytechnic School, from which have graduated the greatest engineers, both civil and military, that modern France has produced. We have seen the Institute, the home of the French *savans*, and have looked upon those sad reminders of the existence of the commune and the falsity of the authors of the legend, everywhere seen, "*Liberté, Egalité, Fraternité*," the ruins of the Hotel de Ville, the Louvre, and the Colonne Vendôme.

We have visited that wonderful depository of ancient industrial relics and of the marvels of modern invention and art the

CONSERVATOIRE DES ARTS ET METIERS.

Here we spent a large part of a day, meeting General Morin and M. Tresca, the distinguished *Directeur* and *Sous-Directeur*; and, by the kind attention of the son of the latter, we succeeded in making a very thorough exploration of this world renowned institution and of its unequaled collections in every department of human industry. The old looms of Vaucanson and of Jacquard are preserved here in the *Salle des Filatures*, in the midst of a multitude of models and machines belonging to the department of textile industry, and are guarded with jealous care as most precious relics. A long gallery is filled with machinery and models of various sorts of machinery, including beautiful models of steam engines, which have cost, in some cases, several thousand dollars. In the chapel, for this was formerly the monastery of St. Martin des Champs, are steam engines of large size, steam fire engines, turbine water wheels, all sorts of apparatus for testing the efficiency of machinery, and large models driven by steam power. In this hall is the first steam carriage ever constructed, that of Cugnot, which was built in 1769. This was before the introduction of the crank, and the engine has a ratchet-like arrangement by which it turns the wheels. For so old a construction, the work seems surprisingly well done, and the proportions are also good. It is an exceedingly interesting machine. We may hope, but can hardly expect, that some future day may see such a splendid collection in our own country. At present nothing approaching this in extent or completeness exists in any other city in the world.

R. H. T.

A Compound Locomotive.

An ingenious member of the Manchester Scientific and Mechanical Society proposes to apply the compound principle to locomotives. This is how he sets about it, says the *English Mechanic*. He would use steam of 250 lbs. on the square inch to work the small cylinder, and expand this steam into a supplementary boiler bearing a pressure of 60 or 65 lbs. to the square inch, so as to have a surplus of effective pressure of 180 lbs. or 190 lbs. in the small cylinder, or about 60 or 65 lbs. in the larger one. The principal alterations proposed are in the boiler. In adapting his plan to a locomotive of the medium size, he would make the boiler 2 feet longer than at present, and divide it into two distinct parts, the part containing the furnace or fire box to be 2 feet shorter than at present, so as to have the supplementary boiler 4 feet longer, both being equal in diameter, and equal in number, size, and position of tubes, the two parts of the boiler being firmly bolted together, and so arranged that the tubes of one are in a line with the other, so that the hot air and flame may pass freely through from one to the other. An important advantage claimed by the plan is that the driver of the locomotive will be enabled to start his engine with the full power of steam in both cylinders at once, which he could not do if compounded in the usual way. Although this plan will require extra outlay, there will be a considerable saving in fuel, which, with other advantages, it is claimed, will more than compensate for the extra cost. We are not surprised to hear that discussion followed the reading of the paper, in which the feasibility of the plan was generally condemned. Ultimately, however, the discussion was adjourned, in order that the inventor might give further information on the subject.

J. W. S. writes to say that he has a perpetual motion in running order, and he will dispose of it for $2,000,000 for a "plot;" but if he has to carry it to Washington, he will ask $5,000,000. The existing financial crisis will, we fear, prevent our correspondent from receiving either of the sums he mentions.