

intricate, construction clearer than any description. It consists simply of a box of sheet iron, divided by a vertical partition into two chambers—which partition, however leaves a space open at the top and bottom for free communication between the two chambers. In one of these chambers which is represented as the larger, and the fether from the side where the flue or chimney is placed stands a fire-box formed of iron, lined with fire-brick, and resting by open bars, on a close ash-pit, in which there is a valved opening by which air enters to feed the fire, and the aperture of which is regulated by a thermometer, which acts so as to enlarge or to contract its extent.—“While the stove door and ash pit door are open,” says the author, “a fire may be lighted, and will burn in the fire box just as in a common grate, and the smoke will rise and pass away by the chimney, mixed with much colder air, rushing in by the stove door; but if the stove door and ash pit door be then closed, and only as much air be admitted by the valved opening in the ash pit as will just feed the combustion, only a small corresponding quantity of air can pass away by the chimney, and the whole box will soon be full of the hot air, or smoke from the fire, circulating in it, and rendering it every where of an uniform temperature as if it were full of hot water. This circulation takes place, because the air in the front chamber around the fire box, and which receives as a mixture the red hot air issuing from the fire, is hotter, and therefore specifically lighter than the air in the posterior chamber, which receives no direct heat, but is always losing heat from its sides and back; and thus, as long as the fire is burning, there must be circulation. The whole mass of air is, in fact, seen to revolve with great rapidity, so that a person looking towards the bottom of the stove through the stove door, might suppose if smoking fuel had been used to make the motion visible, that he was looking in at the top of a great chimney. The quantity of new air rising from within the fuel, and the like quantity escaping by the flue, are very small compared with the revolving mass. There remains to be noticed only the thermometer regulator of the combustion. Many forms presented themselves to my mind, as described in the section on the manufacture of the stove, any one of which will close the air passage, slackening or suspending the combustion at any desired degree, and will open it again instantly when the temperature falls below that degree.

“I had thus a simple box of iron, of cheap and easy construction, answering all the purposes of expensive steam or hot-water apparatus, during its fuel as steadily and regularly as an argand lamp burns its oil, or as an oil-lamp lets its stand run through, and allowing me, by merely touching a screw on the thermometer, rapidly to increase or diminish its heat, as by touching another regulating screw we increase or diminish the light of a lamp.”

As the proof of the pudding is, however, the eating, so the proof of the stove is the heating. We give our author's statement of his own experience:—

“During the winter 1836-7, which was very long and severe, my library was warmed by the thermometer stove alone. The fire was never extinguished except for experiment, or to allow the removal of pieces of stone which had been in the coal, and this might have been prevented by making the grate with a moveable or shifting bar. The temperature was uniformly from 60 to 63. I might have made it as much lower or higher as I liked. The quantity of coal used (Welsh stone coal) was, for several of the colder months, six pounds a-day less than a pennyworth, or at the rate of half a ton in the six winter months. This was a smaller expence than of the wood needed to light an ordinary fire, therefore the saving was equal to the whole amount of the coal-merchants ordinary bill.”

VIENNA, March 7.—The emperor has caused an invitation to be addressed to the nobles of the Austrian empire to attend the coronation of her Majesty the Queen of England, to give splendour to the participation of Austria in that ceremony. In compliance with this wish of his Majesty twenty cavaliers of the highest rank of the nobility, including many of the Hungarian nation, have declared their intention to go to London.

SPAIN.

The reports received from the interior increase in interest, and, in all probability, a serious action will soon take place, or the greater part of the Carlist army will have quitted the northern provinces. The following is an extract

from the royal head-quarters, dated Estella, March 15, seven o'clock, a. m.—“The expedition which I mentioned in one of my last reports as having marched into High Aragon, under the orders of Gen. Tarraqual, was in the first instance only intended to draw some of Espartero's troops from the banks of the Ebro, but such has been its unexpected success, that it is now intended to make that province one of our principal points of operation.—For this purpose two battalions marched yesterday for High Aragon, with instructions to join Tarraqual by forced marches. Although Tarraqual has not been in High Aragon more than eight days, upwards of 400 national guards have voluntarily presented their arms, and as many more have disarmed. Tarraqual, without meeting with the slightest interruption, traverses the province from the walls of Jaca to the Ebro and every where is received with open arms; and yet the Christinos pretend that the inhabitants of this part of Spain are the most hostile to Don Carlos. Facts speak more strongly than words. The whole of the force with Tarraqual consists in about 5,000 infantry and two squadrons, whilst the national guards amount to 9,000 independent of the different Christino garrisons, which with Jaca, at 5,000 troops of the line. Tarraqual having these 14,000 armed men against him, would not have been enabled to remain a day in high Aragon, much less to disarm 800 national guards were the people against him.—Great hopes are anticipated from this movement, combined with others. Had Cabanero been enabled to hold possession of Saragossa but three days all our plants would have been carried into execution, without the least difficulty. Although the ill success of Cabanero has rendered our work more difficult, it has yet had this beneficial result, that we are now convinced that the whole strength of the enemy lies in the army of the north. With that army we intend trying our strength and, with the assistance of the Omnipotent, and relying on the justice of our cause, we have no fear for the result.”

PARLIAMENTARY PRIVILEGES.—It is fortunate for a certain foul-mouthed gentleman, that he did not flourish some 200 years ago, otherwise his tongue might have brought his ears into jeopardy in 1631 a Mr. Edward Floyd was punished by the House of Commons for a breach of privilege in having scoffed at the son-in-law and daughter of the King. The sentence is thus reported:—“1. Not to bear arms as a gentleman, nor be a competent witness in any court of justice. 2. To ride with his face to a horse's tail, to stand in the pillory, and have his ears nailed &c. 3. To be whipped at the cart's tail. 4. To be £,5000. 5. to be perpetually imprisoned in Newgate. It was put pious, first whether Floyd should be whipped or not, because he was a gentleman; yet it was agreed, *per plures*, that he should be whipped. Then it was put to the question whether Floyd's ears should be nailed to the pillory or not, and agreed, *per plures*, not to be nailed.”

Thames Tunnel—Another Irrup-

tion.—On Tuesday morning, the appearance of the ground, and unusual noise, as if from a rushing of water into a cavity, having taken place, the engineer's attention was drawn to the peculiar circumstances, and he therefore anticipated a rush of water. The workmen retreated, in an orderly manner, by the safety-platforms erected by Mr. Brunel the passage of the workman in case of danger, and they ascended to the top of the shaft without any personal injury. In about a quarter of an hour afterwards the water gradually filled the Tunnel. Active operations were immediately commenced for filling up the aperture in the bet of the river.

Mrs. NORTON.—There is at present a suit pending in the Court of common Pleas, which affords considerable conversation among the gentlemen of the long robe, and the legal profession generally. It is an action brought by Messrs. Storr, Morrimer, and Hunt, the celebrated jewellers of Boud-street, Piccadilly, against the Hon. George Chapple Norton to recover the sum of £101 11s. 6d., the balance of £229 12s. 6d., he, the defendant, having paid £128 is., into court for goods sold and delivered to him and to his wife, the Hon. Mrs. Norton, to recover the sum of £101 11s. 6d., the balance of £229 12s. 6d., he the defendant, having paid £128 is., into court for goods sold and delivered to him and to his wife, the Hon. Mrs. Norton, consisting of plate, jewellery, and several articles of *bijouterie*, a portion of which was supplied to Mrs. Norton since her separation from Mr. Norton, and since the appearance of an advertisement in the public prints, setting forth that gentleman would not be answerable for any debts that Mrs. Norton might incur after their separation, Much speculation is afloat as to the defence that will be adopted at the trial, which is anticipated will savour of certain curious disclosures. Serjeant Wilde and Serjeant Talford are the plaintiff's counsel. The cause is expected to come on at the sittings after next Easter term. The object of these proceedings we believe to be a decision not so much as to the liability of Mr Norton, as to the grounds of his separation from his lady. We have heard from various quarters that a reconciliation was likely to take place between the parties, and shall be glad to find that such an event may yet put a stop to the cause here alluded to *John Bull*.

SHOCKING CIRCUMSTANCE. A person of the name of Thos. Blendal, of Hawcoat a village about six miles from Ulverston, who unfortunately lived an uncomfortable life with his wife, has had recourse in a moment of passion, to a most unprecedented expedient in order to rid himself of his troubles. Blendal was in a state of intoxication, and greatly excited at the time, owing, to some trifling dispute; and he asked his wife for some gunpowder which was in the house, and which she after hesitating, some little time, gave to him. He directly threw it into the fire it is said with the horrible intention of destroying his wife, but happily she escaped by running out of the house. The melancholy result of the explosion was that Blendal lost the sight of both his eyes, and also received serious bodily injury, which in all probability, has rendered him an example for life, of the consequences of unbridled passion. The windows were all blown out, and the furniture so injured as to be of very little value.—*Lancaster Gazette*.

Sir F. HEAD'S RECAL.—It appears that Sir F. Head suspended a Judge named Ridoubt, against whom he had privately entertained serious charges.—

The Judge asserted his innocence, and demanded the opportunity of establishing it by proof. The matter necessarily came under the cognizance of the Colonial Office, and, as it may naturally be supposed, a desire was expressed by Lord Glenelg that in a case of so much constitutional importance as that of suspending one of Her Majesty's Judges, the demand for inquiry on the part of the accused should not be denied to him.—a Sir F. Head, however, being perfectly satisfied with his own judgment, deemed any such inquiry unnecessary. He had already pronounced sentence without calling on the accused for his defence, and now that the party accused had learned from his punishment the existence of a charge against him, Sir Francis Head showed that he improved even upon the practice of Rhadamanthus, who, though like Sir Francis, he punished first, did certainly afterwards carefully inquire into the case, and compel the delinquents to confess their crimes.—*Observer*.

HANOVER, 12th March.—The answer of his Majesty the King to the address of the General Assembly of the Estates of the Kingdom, presented to him by a numerous deputation of both chambers on Friday the 9th instant, in reply to his Majesty's speech from the throne on opening the session, contains the following expression—“Frankly and unreservedly I declared to the General Assembly of the Estates, at its opening my decided dislike of a system of government founded on mere arbitrary authority.—But precisely for that reason I am a sincere friend to a representative constitution.”

DEMERARA.—The *Guiana Chronicle* of the 5th of February contains the speech of the Governor at the opening of the Colonial Legislature. In this speech, after alluding to the “happy, contented, and prosperous” state of the colony, and eulogizing the conduct of the apprenticed negroes in the most flattering terms, the governor reports the opinion he had previously expressed to the government at home against abridging the term of their apprenticeship. He says—“I consider the continuance of the present system until the 28th of August, 1840, as identified with the future welfare of this magnificent province.”

EARTHQUAKE AT SHREWSBURY.—An earthquake was strongly and alarmingly felt in this town and vicinity on Saturday. We have received accounts from several districts, and there is an exact agreement among them all as to the time when the shock, or shocks, took place, namely at one o'clock after mid-day. In this town we have ascertained that workmen employed in several slightly constructed workshops felt the tremulous motion in the walls, and an undulation of the floors: at the same time a rumbling noise was heard, similar to that of a train of waggons passing rapidly along a paved street.

THE STAR

WEDNESDAY, MAY 9, 1838.

The “SENTINEL,” we are requested to state will be published on Tuesday next, the 15th inst., the issuing of it having been delayed by some extra work.

We beg to call the serious attention of our readers to an account of Dr. ARNOTT'S newly invented Stove, so ably described in another column. It would appear that a moderate sized room can be kept warm in England at one penny a day, and allowing for all expences, a room in this country may assuredly be heated at less than two pence a day. Some of the Stoves may soon be expected, and we have no doubt at all, but that thousands of them will meet a ready sale in this cold climate.

Dr Arnott's Stove

DRIVER and METFORD beg to inform the Nobility and Gentry, that they Manufacture the celebrated Dr. ARNOTT'S Stove. This invention combines the greatest economy, safety, and cleanliness, with the most effective operation of any mode of heating yet discovered, and is adapted to places of Public Worship, public establishments, halls, vestibules &c. May be seen in operation at their Stove Grate Manufactory and Iron Works.

Southampton, March 9, 1838. [Dr. ARNOTT'S STOVE.—We see by advertisement that this useful and economical Stove is now manufactured to any