New Material for the Production of Gas. A Mr. McKenzie, of Glasgow, Scotland, as we learn by Rylands' Iron Trade Report, has been experimenting by mixing the coal dust (bituminous) at the mines with crude petroleum, as a basis for the manufacture of illuminating gas. The result of his experiments is said to be very encouraging. The idea is that in the distilling of petroleum alone, a large quantity of the vapor is re-condensed into oil ; but by combining the coal with it this waste is prevented, and a coke is left as a residuum which is superior to that from coal alone.

All this may be true, but as the same process has been fairly tested in this country without success, we take the liberty to doubt the professed result. What advantage there can be in the presence of the "coal gum," or siftings, for the production of gas, beyond that afforded by the oil alone, we cannot discover. If, as is stated, a portion of the vapor from oil in the process of distillation is re-converted into oil, "on coming in contact with a cool surface," the remedy is plainly a low distillation. As the oil alone is considered, in the article from which we derive these statements, as the gas producing material, the coal is no better than any other substance to retard the conlensation of the gas to an oleaginous liquid.

## DUNN'S IMPROVED WAGON JACK.

A lifting jack that is light, portable, and self-re-

desideratum. Most, if not all, of those in general use, must be semred by a pin or otherwise, when the axle of the carriage is raised, but the jack shown in the engraving is in this respect self-operating.

The two uprights are pivoted to the lever, and when the lever is depressed the position assumed is that shown by the dotted lines, the lever shutting into the mortise or channel of the main standard, and the weight of the axle and carriage holding the jack in position. Pine placed at varying distances receive the axle and support the weight. The operation of the im plement can be easily comprehended by the aid of the engraving.

Patented July 24, 1866, by Albert Dunn, Plainfield, N.J. For territorial and manufacturers' rights, address Albert Dunn & Co., as above.

## [From our own Correspondent.] FOREIGN SCIENTIFIC NEWS.

The scientific societies of London have now all closed their sittings for the season, after the performance of no inconsiderable amount of valuable work. The recent discovery in Egypt of another stone, with an inscription in three different languages and styles of writing, including Egyptian hieroglyphics, has proved a great boon to philologists. It consists of a vote of thanks from the Priests of Memphis to one of the Ptolemies, in which respect it resembles the Rosetta stone in the British Museum-the stone which first threw light upon the inscriptions upon the monuments of ancient Egypt. On the newly-discovered stone the inscription is longer, and proves that Eastern scholars have been right in the interpretations they have fixed upon many unknown characters, in the absence of direct evidence. Such is the advance in this branch of knowledge that, in past numbers of Good Words, Chambers's Journal, and other periodicals, may be found translations of fairy tales written in the time of the Pharaohs.

M. De Waldeck, an old gentleman more than 100 years of age, who served under the first Napoleon, has recently returned from Mexico and Peru, where, for a long time, he employed a staff of Indians in excavating some of the remains of the ruined cities of Central America. He has brought back and exhibited at the Ethnological Society many exquisitely-executed drawings and paintings of the grotesque pieces of sculpture dug up under his supervision. Some of the screll work of the sculptures is very Grecian in its style, and the head of the elephant is frequently reproduced. Mr. Mackie, one of the mem- vide. Some of the Panama line of steamships have porting royalty.

bers of the Ethnological Society, is strongly of opinion that some of the characters cut upon these remains are of Assyrian origin, but is little supported in his views by his colleagues.

All the numerous telegraphic cables between England and the continent of Europe are constantly so full of work, that the experience thus gained created great fears that the Atlantic cable, when laid. would be choked with messages, and thus be a slower method of communication than by post. For this reason there is little or no complaint in England about the charges of the Atlantic Telegraph Company, since "high charges" are synonymous with great speed." Again, the Company for twelve years has had to fight with great disappointments and difficulties, and sunk nearly £2,000,000 of capital, with interest, in the undertaking. As the iceberg season off Newfoundland begins in February next, and lasts till August, during the whole of which time the icebergs yearly ground on the banks off the coast, the public can scarcely complain that the shareholders try to reimburse themselves before the time of greatest danger to the cable begins. The 'certainty" of the apparatus used for transmitting messages by the cable is now a matter of public interest. Mr. Varley, considering the delicate nature of the receiving instrument, produces wonderfully sharp and unmistakable signals; still they have not

the certainty of the Morse telegraph, which prints taining, when the weight is imposed upon it, is a its messages; or of the needle telegraph, where the



ear assists the eye in the work of reading. The little ray of light, like a bright vertical tongue of fire, sways to and fro upon the ivory scale of the galvanometer, and from its vibrations the messages are read, yet it is very desirable to test the certainty of the apparatus by sending through it a large number of figures and proper names, so that no aid in reading may be afforded by the context, and the reliability of the method of signaling be fairly tested.

On reference to the map of Great Britain, your readers will notice that at the extreme west of England is a magnificent harbor, Milford Haven, opening to the Atlantic as if to welcome visitors from America. Yet its shores are deserted, the great tide of traffic passes outside the mouth of the harbor, and bears northward to Liverpool, to encounter all the dangers of channel navigation, and to add to the number of black spots upon the wreck charts. The natural advantages of Milford Haven have never been economized, because the counties in its neighborhood are poor, without power to de velop its resources, and, till lately, there has been little railway accommodation in the district. Within the past five years, two new lines have crept down to its shores, and the direct railway from Milford Haven to Manchester is in progress. The country in the neighborhood of the harbor is rich in anthracite coal, and the steam coal from the great Aberdare carboniferous basin is within easy distance by rail. At present the only signs of life at the Haven are a Government dockyard, and the town of Milford, which is nothing more than a miserable village, with a large percentage of uninhabited houses. The late First Lord of the Admiralty, the Duke of Somerset, declared that the great want of Milford Haven was dock accommodations, which private enterprise is now taking some steps to pro-

been sent by their owners to coal in the harbor, which, from its natural advantages, will probably, in the course of years, prove a great boon to all engaged in trade between England and America.

In my last, it was mentioned that a great body of archæologists, headed by the Marquis Camden, K. G., the Bishop of Oxford, and other gentlemen, had just invaded London to examine its ancient ruins and antiquities. They visited Windsor Castle, where Queen Victoria threw open to inspection every part of the building of interest, including some subterranean passages leading from the interior of the fortress, through the chalk rock, to the bottom of a shaft 35 feet deep, opening in the park, outside the outermost walls of the royal residence. The date of construction of these passages is not known. The archæologists also explored the Tower of London, under the guidance of Mr. G. T. Clark, the trustee and manager of the Dowlais Iron Works. Mr. Clark proved a most efficient cicerone. and in the course of his remarks narrated an unpublished anecdote of the late Duke of Wellington. At the time that His Grace occupied the position of High Constable of the Tower, he kept the public records in a room above the powder vaults. A literary gentleman, on making this discovery, hastened to the Duke, and asked him, "Whether he did not think it a very dangerous thing to keep the records on the top of the powder magazine ?" The listener, who regarded the question purely from a military point of view, seemed startled at the sug-gestion, and replied, "Oh, I never thought of that before." He then mused for a minute, and brightening up he told the querist-" Well, perhaps it is not so dangerous after all, for I really don't think they will hurt the powder !" Mr. Clark piloted his party all over the ancient building, and at last, in the chapel in the White Tower-the chapel in which William the Conqueror and his rapscallions once knelt at their devotions, such as they were-the archæological students listened to perhaps the most instructive and eloquent discourse ever delivered within its walls. He told how Lady Jane Grey, Sir Walter Raleigh, and many others, had knelt before the rude altar in that chapel, and afterward dared to suffer and to die for the sake of opinions which they believed to be true. On the Tower Green, just outside the door, the noblest blood in England had been shed, and beneath a neighboring staircase had been dug up the bones of the two murdered princes. The whole atmosphere of the place seemed heavy with crime. Mr. Clark concluded with a few remarks about the Tower as a royal residence of the Plantagenets, who having lived out their lives of virtues and crimes, were carried forth to Westminster Abbey, where now they lie upon their altar tombs, with their weapons by their sides and their hands uplifted to heaven, peacefully awaiting the final resurrection. W. H. H.

London, Tuesday, August 28, 1866

## The Bremen Rose-Wein.

A correspondent to the Nation gives an estimate of the value of the famous Bremen rose-wein, which, in the year 1624, cost \$165 per cask, and is now two hundred and forty-two years old. Calculating the original outlay at ten per cent compound interest, he states that in 1865 the value of each cask was \$231,-883,905,000, or nearly ninety times the present debt of the United States, while each bottle was worth \$161,039,499, very nearly the sum realized from dutles on imports in the United Stateslast year. Each glass was worth \$20,000,000, and each drop \$20,000. We should think that this wine had been kept almost too long, and the owners had better "realize" soon, unless they want to lose on it.

A NEW system of small coinage, invented by Mr. Hall, of Buffalo, is now under consideration by the Government, with prospect of being adopted for future coins. The plan consists in having upon the center of the one-cent pieces a raised star, the nucleus of which is represented by a hole through the coin, the two-cent coins are to have two perforated stars, the three-cent coins, three.

In Turkey, the income of the sovereign absorbs ten and eight-tenths per cent of the entire revenue. In England six-tenths per cent are applied for sup-