the soil.

Powdered charcoal possesses a similar action, but surpasses all other substances in the power which it possesses of condensing annonna within its pores, particularly when it has been previously heated to reduces. Charcoal absorbs 9.1 times its volume of ammoniacal gas, which may be again separated by simply moistening n with water. (D. Saussure.) Decayed wood approaches very nearly to charcoal in this power ; decayed oak wood absorbs 72 times its volume, after having been completely dried under the airpump. We have here an easy and satisfactory means of explain. ing still further the properties of humas, or wood in a decaying state. It is not only a slow and source of carbonic, acid, but it is also a means by which the necessary nitrogen is conveyed to plants.

Narogen is found in lichens, which grow on basaltic rocks. Our fields produce more of it than we have given them as manure, and it exists in all kinds of soils and minerals which were never in contact with organic substances. The nitrogen in these cases could only have been extracted from the atmosphere.

We find the nitrogen in the atmosphere in rain water and in all kinds of soils, in the form of ammonia, as a product of the decay and putrefaction of preceding generations of animals and vegetables. We find likewise that the proportion of azotised matters ia plants is augmented by giving a larger supply of ainmonia convered in the form of animal manure. No conclusion can' then have a better foundation than this,

that it is the ammonia of the atmosphere which furnishes nitrogen

Carbonic acid, water ammonia, contain the elements necessary for the support of animals and vegetables. The same substances are the ultimate products of the chemical processes of decay and patrofaction. All the innumerable products of vitality resume, after death, the original from which they sprung. And thus death -the complete dissolution of an existing generation-becomes the source of life for a new one.

## NEWS.

PEACE OF EUROPE .- The prospects of continued peace among the European powers are much more favorable than at the last advices. The war between France and Morocco has been terminated, and a treaty of peace has been signed, the terms, of the Prince de Joinville having been unconditionally accepted by the Moors. This victory of the Prince has awakened great enthu-siasm in France, and his return will be attended with many popular demonstrations. As to the difficulties between England and France, growing out of the Tahiti affair, there is now no probability that they will occasion hostilitics .-- Sir Robert Peel stated in Parliament that there was no reason to doubt that the assurances they have received relative to the proceedings taken by the French in Morocco and on the African coast will be strictly fulfilled; and that with regard to the difficulties at Tahiti, the requisitions of England would be substantially complied with by France. That is, Bruat, the infamous French officer by whom the outrages were committed, is to be recalled, and a compensation of 25,000 france to be made to Mr. Pritchard by the French govern. ment. The result does not appear to be satisfactory to the friends of the mission in England; but the event which is to keep the two most powerful nations on the globe from the horrors of war, is to be rejoiced in.

LIBERATION OF O'CONNELL .- Another most important item is that the decision of the Irish Court by which Mr. O'Connell was sentenced to imprisonment, has been unconditionally reversed in the House of Lords, although most of the Justices, both of Eng-land and Ireland, delivered opinions in its favor. The sentiments of the House appear to have been chiefly influenced by the clear and decided opinions of Lords Denman, Cottenham and Camp-bell. Lord Brougham in the face of his former life and principles voted for the confirmation of the sentence.

Of the eleven counts which compose the monster indictment they pronounced more than half to be either informal or bad. Four of the counts they held to be informal by the finding of the jury, and two to be radically bad. The bad counts are the sixth and seventh, which charge the monster meetings, and form the gist of the offence.

When the event became known, Ireland was thrown into a and endervoured to pull down the Unit state of indescribable excitoment. "O'Connell is free," was utter- resisted, and a Chinese man was shot.

separated by every shower of rain, and conveyed in solution to jed by thousands of voices, as the people danced about in almost trantic joy. At Dublin the same scene was exhibited, but up n a more extensive scale. At night, tar barrels were lighted in muny parts of the city, and had it not been for the interference of some of its leaders, a general illumnation would have taken place. O'Connell is said to have received the intelligence of his release without betraying the least emotion of surprise. G cat numbers of his friends waited upon him to offer him their congratulations.

He, leaning upon two of his sons, left the prison on foot, and proceeded, accompanied by an immense assumblage to his house, where he shortly addressed the crowds who were assembled in front of the house, thanking them for their peaceful conduct during his incarceration, urging them to a continuance of the same conduct and promising them that they should shortly have what they have been long striving for-Repeal.

On Saturday, according to arrangement, there was a grand demonstration, in the form of a triumphal procession, in which the whole of the trades of Dublin took part. -N. Y. Eo. A public banquet was to be given to O'Connell on the 13th.

THE QUEEN.—Her Majesty accompanied by hor husband, has gone on a second trip to Scotland. She was greeted with great enthusiasm on her way. The young Prince has been christened with the name of Alfred Ernest Albert. The occasion was one of great point, the Archbishop performing the rite and the Duke of Cambridge as one of the god fathers. The Queen's promised visit to Ireland has been indefinitely postponed.—Ib.

PARLIAMENT .- Parliament was prorogued by royal commission on the 5th. The Queen's speech was read by the Lord Chan-cellor. but contains, nothing worth notice. Before the next inceting some important elections are to take place .- Ib.

A Liverpool paper states that a large number of Calvinistic Methodists, (a thousand or more) from Curnarvon and Anglesey, are preparing to emigrate to this country, with a view of forming a community on the banks of the Mississippi.-Ib.

The national schools in England have increased during the last four years from 6778 to 10,087, and the number of scholars for whom accommodation is provided from 587,911 to 875,194, or at the rate of more than 71,000 a year.—*Ib*.

Last year the revenue received upon strong spirits in England was £3,025,233; ditto, in Scotland, £1,025,529; and in Ireland (thanks to Father Mathew) only £852,482.—Ib.

STATE OF THINGS AT TAHIII .- A letter from Tahiti gives an account of some proceedings between the French and the natives in that Island up to the middle of April;

A battle was fought at Taiarabu on the 24th of March. The French took a native married woman and ran away with her to the fort they were building at Taiarabu. 'Ine woman screamed, and call her husband to rescue her ; her husband and seven more natives immediately took up their clubs and guns and ran into the fort, where there were 20 soldiers, and took the fort from them and killed all the French soldiers that was there. The next morning the French left the Embuscade, that was at anchor near there and went and fell upon the natives, but were completely routed by them. The Tahitians were decidedly the conquerors in that battle. About three weeks after, the Governor went with two more ships of war, the frigate Cranie, and the steamer, and fired all along the coast till they got to Mahaena, the place where the natives were. Captain Henry endeavoured to persuade the Governor not to go, but he would go, and said he went to retneve the honor of France. Captain Henry took them up the back of the native fort, by a by path-way about three miles along, and fied into the fort on the natives from off the hill at the back of the f rt. While the Tahitians were scrambling up the mountains to them, the ships fired grape shot on them and killed several. The French suffered a great loss, though they will not own it. Four of their officers were killed in the last battle. Pomare was waiting patiently for the news from England. The natives were determined not to go back to their stations till they heard from England. All the missignaries, except four, had been constrained to leave the Island in consequence of the distressing state of affairs.

A letter from China says, at Canton the populace was quite unruly. An arrow as a wind van had been placed on the top of the United State's flag, and great umbrage had been taken at this by the Chinese. On the 6th of May, Mr. Foster, the American Consul, had caused it to be taken down. While doing this, a riot commenced among the rabble, which was with difficulty supressed. On the 17th, the mob broke into the American factory and endervoured to pull down the United State's flag. They were