

With every 2650 lbs. of firwood which are yearly removed from an acre of forest, only from 0.114 to 0.53 lbs. of alkalis are abstracted from the soil, calculating the ashes at 0.83 per cent. The moss, however, which covers the ground, and of which the ashes are known to contain so much alkali, continues uninterrupted in its growth, and retains that potash on the surface, which would otherwise so easily penetrate with the rain through the sandy soil. By its decay, an abundant provision of alkalis is supplied to the roots of the trees, and a fresh supply is rendered unnecessary.

The supposition of alkalis, metallic oxides, or inorganic matter in general, being produced by plants, is entirely refuted by these well-authenticated facts.

It is thought very remarkable, that those plants of the grass tribe, the seeds of which furnish food for man, follow him like the domestic animals. But saline plants seek the sea-shore or saline springs, but the *Chenopodium* the dunghill from similar causes. Saline plants require common salt, and the plants which grow only on dunghills need ammonia and nitrates, and they are attracted whither these can be found, just as the dung-fly is to animal excrements. So likewise none of our corn-plants can bear perfect seeds, that is, seeds yielding flour, without a large supply of phosphate of magnesia and ammonia, substances which they require for their maturity. And hence, these plants grow only in a soil where these three constituents are found combined, and no soil is richer in them than those where men and animals dwell together; where the urine and excrements of these are found corn-plants appear, because their seeds cannot attain maturity unless supplied with the constituents of those matters.

## NEWS.

**O'CONNELL AND REPEAL.**—O'Connell has retired to his mountain home at Derrynane to find a seasonable respite in rural sports. He had decided that the Clontarf meeting should not be held. The threatened "impeachment" was to be father considered of. O'Connell proposed to travel through England prior to the meeting of Parliament, "state the facts to the English people, and then leave them to act for themselves."

It is said, in quarters likely to be well informed, that Sir Robert Peel meditates a decided legislative measure in regard to the systems of tenure of land in Ireland. The nature of his project has not transpired.

**THE OVERLAND MAIL.**—The most prominent feature in the intelligence is, that a treaty had been concluded between the United States and the Celestial Empire, based upon the same principles as dictated that between England and China—in which America will enjoy all the advantages which Great Britain, by her arms, secured, after an immense outlay of blood and treasure.

It is very commonly rumored in the city, that it is the intention of Government to exclude from the Court, and from the ministerial parties, all the foreign Ministers or Charges d'Affaires, whose Governments have not faithfully fulfilled their engagements with their creditors in this country. Such a proceeding would place the United States Representative in a very embarrassing and unenviable position.

Sir Andrew Agnew, together with other friends of the Sabbath, has addressed a letter to Lord Aberdeen, in which it is requested that the movements of the Queen may be made so as not to cause any breach of that holy day. It will probably be regarded. The Queen is expected to visit the Isle of Wright, after her visit to Scotland.

The Queen's visit to Scotland is exciting much interest in that country, the following is one of the incidents recorded.

"The Queen and Lady Glenlyon went into a cottage and had some bread and milk." Another version makes the "cottage" a "hut," and varies the incidents—"The gudewife was spinning, and the Queen sat down and conversed with her very affably for some time. The inmates did not know the rank of their visitors, and in accordance with the custom, they put a bottle and glass on the table, and asked them to taste the mountain-dew." We are not told whether the visitors did taste the whisky.

**FREE CHURCH ZEAL.**—Our brethren of the Scottish Free Church are manifesting a zeal and energy in promoting the gospel, altogether new. Among the recent enterprises adopted, is building of a beautiful and convenient yacht, of thirty-seven tons, for the purpose of carrying ministers of the Free Church on oc-

casional visits to the destitute parishes among the Highlands. From the nature of the country, there are many of these places which are very difficult of access by land, but can readily be reached by water.—*Evangelist.*

**THE FRENCH AND SLAVERY.**—The following passage, from the statement of Mr. Richardson, will show how "French civilization has abolished slavery" in Algiers:—

"Many black slaves, believing that they could escape slavery, have fled from their masters to serve among the Zouaves, or native troops; but the Minister of War has always given orders to send them back to their Masters. Mons. Leblanc de Trebois relates a case of a couple of slaves who fled from Ab-del-Kader, believing they should find Algiers *la terre de la liberté*, but who were restored by Marshal Vallee to the Emir, and these wretched fugitives were afterwards butchered by their enraged masters.

"In Oran, slaves are bought and sold, and are beaten and maimed at the absolute command of their masters, unrestrained by the French laws or authority."

**RUSSIAN SERFS.**—Brooks says, the serfs in Russia are between thirty and forty millions in number. For his house and patch of land, the serf pays his proprietor in labour, which takes about one half of his time, leaving him only the other half to support his own family. Sometimes a princely proprietor will have hundreds of serfs on his estates. This numerous class of Russians have little means of education, and are usually very ignorant and degraded.

**UNITED STATES AND THE SLAVE TRADE.**—The London papers loudly and most righteously complain of the insincerity manifested by our Government in carrying out the treaties for the suppression of the slave trade. The stars and stripes of our free country are still employed to screen from British vigilance vessels loaded with slaves. A letter was recently addressed to our Minister, Mr. Everett, in which it was stated "that American shipping is employed in transporting to the coast of Africa merchandise, equipments, and other articles necessary for slave-trade operations." It appears also that it is a custom for slave-dealers to purchase a vessel from Americans, with a stipulation that a voyage or two shall be made to the slave-coast under the sanction of the American flag, before the transfer of the vessel is publicly made to the real owner. In other words, the flag of America is to be used as a protection to slave merchandise until money enough is made by the horrible traffic to purchase the vessel.—*Evangelist.*

**SUNDAY SCHOOLS IN BALTIMORE.**—There was a very large and beautiful procession of the Protestant Sabbath Schools of Baltimore and vicinity last week, in which, by actual count, they were 6211 children of both sexes, and 93 teachers. It is spoken of as one of the most delightful moral spectacles ever witnessed. The several schools were ranged under tastefully decorated banners. The procession was one hour and a half passing a given point, and marched to the Washington Monument Square, where addresses were made, hymns sung, and prayers offered. Who that can anticipate a quarter of a century, does not exult and take courage at what this great and benevolent institution of Sabbath Schools is doing in the midst of us.

**POPULAR INTERPRETATION OF THE FOURTH COMMANDMENT IN THE UNITED STATES.**—"Remember the Sabbath-day to keep it holy." (or consecrate to religious duties.) Except you peruse some one or more of the following WORKS OF NECESSITY as your worldly employment, viz :

Shaving and hair dressing. Keeping a livery stable, or driving a cab or hack. Attending a drug, medicine, and soda water establishment. Taking toll on a bridge or turnpike. Keeping a public house, and attending the bar. Driving a coach or stage belonging to a mail contractor, or are connected with the post office. Are a conductor, engineer, ticket-vender, or otherwise connected with a railroad company. Are employed at a ferry.—Are engaged in printing and publishing a daily newspaper, or in supplying families with milk, bread or other provisions. Are a physician, and have an extensive practice. Drive a baggage or freight waggon, and divers others like employments.

A true bill has been found in Baltimore against the Rev. C. T. Torrey, charged with enticing away slaves.

It is estimated that the present Mormon war will cost the State of Illinois \$20,000. The aggregate expense incurred during the year will not be less than \$50,000.

A newspaper is to be established at Willamette, in the Oregon territory, the materials for which are to be shipped at New-York to the care of Messrs, Ladd & Co., Oahu, Sandwich Islands.