the dreams of the ancient poet or the thought of the ancient philosopher.

With a passing glance only at all of this varied knowledge, our seminaries of learning go on in the old dog-trot way, devoting the most valuable years of the student's life to the minute details of Grecian and Roman literature and language. We are glad to see the conservative persistence in this course giving way. Among all the signs of the times, there is none more full of glorious promise than the steady progress of that reform in education which is substituting, for the puerilities of ancient fable, the useful and the sublime truths of modern science.

FACTS CONCERNING THE GOODYEAR PATENTS.

We have examined some of the testimony which has been taken in the Goodyear patent extension case, and, apart from our general opposition to the principle of extending patents by Congress, we are thoroughly convinced that it would be a gross outrage upon the rights of the public to sanction another extension. The appeal to Congress is ostensibly made on account of the poverty of the family; but how they will be able to support it on such ground, and in face of facts, is one of the mysteries that we must leave to the ingenuity of the lawyers, who are usually most admirable scene-shifters. The testimony reveals the fact that the Goodyear heirs have nine patents in the United States, forty-seven in Great Britain, sixteen in France, four in Belgium, three in Austria, and two in Holland, making a total of seventy-one patents. The cost of procuring these patents must have amounted to a very large sum, and, without doubt, the expenses thus incurred are all charged to the two American patents, which are now before Congress for extension. The estate of Charles Goodyear claims to own the patent of Nelson Goodyear, granted in 1851, the tariffs from which amount to nearly if not quite $30,000 per annum. We wonder if these receipts on the part of the estate are as carefully accounted for, as are the expenses, which appear in the testimony? We notice in the schedule of debts owed by the estate one them of over $9,000, which Goodyear paid for a "flock" patent in England. We wonder what this item has to do with the two patents now before Congress? If it is legitimate to lug into the account "hotel" and other bills, we submit that it is equally important to show the full measure of receipts which accrue to the estate from all other sources besides the two patents in question. To support a claim of poverty and suffering, which can justify Congress in acting favorably upon the cases, it cannot be regarded as honorable on the part of the petitioners to charge all the items on one side, and withhold those upon which the heirs are depending for their support.

It also appears that during the year 1863 only five of the licensees paid tariffs to the estate of Goodyear, amounting to over $22,000, and the receipts—from Jan. 1, 1864, to Feb. 10—have amounted to nearly $20,000, to which add receipts from the Nelson Goodyear patent—some $30,000—and we submit in all candor that the heirs will find in their poverty much that will afford them solid comfort. There are thousands of meritorious inventors, tradesmen, and farmers, who would wax joyful in such a state of indigence.

It is estimated that the nett sales of the various manufacturing companies now engaged in producing india-rubber goods will amount annually to not less than eight millions of dollars. Now if the patents are extended for another term of seven years, at this rate of sales, from which the heirs are to receive five per cent., the amount coming to them would be nearly, if not quite, four hundred thousand dollars per annum—or two million eight hundred thousand dollars. Think of that, ye hard-working farmers and mechanics! Will you consent that your industry shall be thus taxed for the benefit of a few heirs and some eight or ten rubber manufacturing firms?

We are fully aware of the immense financial ability and "wire-working" capacity which the "combination" possesses—it is already apparent in the well-arranged details that are now in operation to secure the extension; but we do not—we cannot—believe that our legislators can sanction this stupendous encroachment upon the rights of the people. There is not, in our judgment, one particle of moral or legal merit in the claim; and unless we are much nearer to the degenerate age than we suppose, we feel warranted in assuring the public that Congress will not allow the extension; and even if it should, we think the President, upon a proper representation of the opposing facts, would never sanction it by his signature; the opposition, however, must be earnest and energetic. Every man in the country, who has its welfare in view, should remonstrate against the scheme. Write letters to your members of Congress, and stir up your State Legislatures to act against it. One hundred and seventeen members of the New York Legislature have signed a memorial to Congress against it; but the opposition is not yet what it should be.

THE COST OF COAL.

We have before us a report of the Ashburton Coal Co., whose mines are located in Schuylkill and Luzerne Counties, Pa. The report says that each colliery when worked to the best advantage will produce 75,000 tuns of marketable coal annually, making the aggregate yield of the mines 450,000 tuns. *The cost of mining will be about* $1,30 *per tun, and the transportation to the New York market about* $2.90, *making its cost per tun in New York about* $4.20. The selling price of coal in New York to-day is $9.50 per tun, showing, if this report can be relied upon, a clear profit of $5.30 per tun. We have never believed that the coal companies were warranted in charging such extravagant prices for coal, and here we have the published proof of the correctness of our views. To maintain the present exorbitant price of coal in face of these facts is an imposition, and we trust that some measures can be adopted to put a stop to the continuance of this extortion upon the necessities of the people.

SWINDLING MINING COMPANIES.—LOOK OUT FOR THEM!

One of the most alarming signs of the times in which we live is the extraordinary and villainous speculations now rife in Wall street, in the shape of gold and other mining operations. Bogus companies are forming every day, whose foundations are as the "baseless fabric of a vision," and soon they will "leave not a wreck behind." A prominent gentleman in this city informed us, a few days ago, that he had been offered $20,000 for the use of his name as trustee of one of these "shyster" mines; and being an honest man he declined to have his name used for the base swindle. We warn the people to beware of these swindlers—they should shun them as they would the gambling-hells of the city. These vile schemes are incubated and hatched in the region of the Stock Exchange, and are designed to entrap the innocent and unwary. Every one of them ought to be indicted by the Grand Jury, and the guilty swindlers sent to Sing Sing. The famous forger, Huntington—now serving his time in prison—was not one whit more guilty than are the rascals who engineer these bogus mining operations.

THE NEW STEAM REVENUE CUTTERS.

On page 74, present volume of the Scientific American, we gave a detailed account of the engines of these vessels, and on the 1st instant, we saw one pair of them under steam. These engines are geared, it will be recollected; and nothing can exceed the regularity and and smoothness with which they worked. Holmes' balanced slide valve is attached to the engines, and on this occasion worked admirably. The main valves have large areas, and removing the pressure from the faces is attended with advantage well-known to engineers. The contrast between geared screw engines and direct-acting ones was, in this instance, very marked, as these machines were running at a very low rate of piston speed while the screw was revolving rapidly and noiselessly; the vessel was, however, alongside the dock. We hope to be present on the trial trip when we shall no doubt present facts of interest to the engineering profession. Mr. George Simmons is the chief engineer of the vessel which is called the *Ashuelot*. Mr. Simmons has been for many years upon first-class sea-going steamers, and is a skillful and careful engineer.

Good manners are a part of good morals; and it is as much your duty as your interest to practice in both.

RECENT AMERICAN PATENTS.

The following are some of the most important improvements for which Letters Patent were issued from the United States Patent Office last week; the claims may be found in the official list:—

Head-rest.—This invention consists in a self-fastening spring clamp capable of being attached instantaneously to the back of a chair or car seat or any other similar article, and provided with a stationary and with an adjustable socket, in combination with a vertically adjustable pad, in such a manner that by fastening the clamp to the back of a chair or seat of any other description, and inserting the pad in either one of the sockets the pad or head-rest can be readily accommodated to the desired position and to the stature or size of the occupant of said seat, and a convenient and comfortable rest for the head is obtained. Ephraim Hambujer, of Detroit, Mich., is the inventor of this improvement.

Copying Press.—In copying presses the platen is attached to the pressure screw by means of a socket termed a foot-piece in which the screw is obliged to turn freely. The foot-piece is commonly made of a separate piece of brass and secured rigidly by screws to the platen and attached to the screw by turning a groove in the lower part of the screw and casting a groove in the interior of the foot-piece, and pouring zinc or other easily-fusible metal or alloy into the said grooves through a hole provided in the bottom of the foot-piece, before the latter is attached to the platen. The object of this invention is to make a cheaper connection between the screw and the platen, and to this end it consists in casting the foot-piece in the same piece with the platen. Francis Hovey, of New York city, is the inventor of this improvement, and further information may be had of the assignee, E. W. Frost, of 24 Beekman street, New York.

Gas-cooking Apparatus.—The object of this invention is to produce the largest possible heat by the consumption of the least possible quantity of gas, and this object is obtained by the combination of a mixing chamber with a central air passage, in such a manner that the gas is first mixed with atmospheric air in said chamber, and furthermore, a supply of fresh air is thrown into the center of the flame, and by these means sufficient oxygen is supplied to completely consume the component parts of the gas and to produce the most intense heat. The mixture of air and gas is burned between two edges, and by this arrangement, together with the central air passage, the flame assumes the shape of an annular cone, whereby the gases rising through the burner are compelled to come in contact with each other and not a particle of gas is allowed to escape unconsumed. E. W. Bullinger, of Brooklyn, N. Y., is the inventor of this improvement, and he may be addressed at Box 1,775, Post-office, New York.

Apparatus for separating Gas.—Petroleum on being taken from the wells contains a large quantity of gas, which, when separated from the oil, can be used for fuel, and also for the purpose of illumination, and furthermore by expelling the gas the inflammability of the oil and the danger of explosions consequent upon this inflammability is considerably reduced. By the apparatus which forms the subject of this invention the gas is expelled from the oil by the action of a current of air forced in by a fan-blower, or any other convenient means, and by the action of an air-pump it is stored up in a suitable receiver from which it may be conducted through suitable pipes to the place or places of consumption. Jas. Smith and Allan Greig, of Tarrville, Pa., are the inventors of this improvement.

In the south of Russia, grapes are preserved by the following process:—They are gathered before they are quite ripe, put into large air-tight jars, so filled with millet that the grapes are kept separate. They are sent in this way to the markets of St. Petersburg. After remaining thus for a whole year they are still very sweet, all their sugar being developed by the ripening process in the pots.

Sunflower Seed.—Chickens are very fond of sunflower seeds, which not only fatten them very quickly but make their flesh very tender, juicy and fine-flavored. Therefore it will be well for you to plant sunflowers in some corner of your grounds for this purpose.—*Cor. of Dollar Newspaper*