justice of men. And the common sense of mankind has marked a distinction between such monopolies and the exclusive rights conceded to inventors. Their rights under patents are called monopolies only from the poverty of language, which has failed to express in words a distinction which no less clearly exists. The odious monopolies, or those properly so called, such as were given in the time of Elizabeth, for the sale of salt, starch, paper, steel, &c., were grants simply to aid individuals in amassing wealth, and favored the aggregation of property in a few hands without opening new sources of national wealth, and were thus in derogation of the rights of others without compensatory public benefit, and were therefore positively injurious. Prof. Bowen has shown, in opposition to dogmas of Adam Smith, that individual and national wealth are not identical; that individuals grow rich by the acquisition of wealth previously existing; nations, by the creation of wealth that did not previously exist. "Invention," says Mr. Ray, according to Prof. Bowen, "is the only power on earth that can be said to create. It enters as an essential element into the process of the increase of national wealth, because that process is a creation, and not an acquisition. It does not necessarily enter into the process of the increase of individual wealth, because that may be simply an acquisition, not a creation." "Hence," continues Mr. Bowen, "the most frequent cause of the increase of national wealth is the increase of the skill, dexterity and judgment, and of the mechanical contrivances, with which national labor is applied." In this view, how can a monopoly of a trade be compared with the exclusive right in an invention? How can the exclusive privilege to sell salt in Elizabeth's time, which added not one bushel to the production, but which enriched the monopolist and robbed the community, as was the fact, by raising the price from sixteen pence a bushel to fifteen shillings, and the exclusive right of Whitney to his invention of the cotton gin, which has added hundreds of millions to the products and exports of the country, be both branded, with equal justice, with the odious name of monopoly?

The argument of the distinguished member of Parliament, Mr. Ricardo, against patents, on the ground of their being monopolies, may have less weight when the immediate practical grounds of his objections are considered. It appears from his evidence before the committee that he was chairman of the Electric Telegraph Company—the great company which, under Mr. Wheatstone's patents and a charter from Parliament, exclusively controlled the system of telegraphic communication in England.

In appears that the company paid for the patent rights under Mr. Wheatstone the sum of £140,000, and that the company had paid nearly £200,000 in buying patents and litigating them; that the company had bought up a very large number of patents which interfered with their exclusive rights, because they had made it a rule, if a man offered reasonable terms, to buy an invention, however bad it might be, sooner than litigate it; and that they paid for one patent—that of Mr. Bains—£8,000 or £9,000, which, although it did not quite come up to the expectation of the company, they found useful in combination with other patents. The obvious question occurs, how, but for the existence of the patent laws which recognized the rights of the company to the exclusive use of Mr. Wheatstone's and Mr. Bains's patent, for which they had paid the inventor a full equivalent, could they have had the means of reimbursing themselves for the vast expenditure for the original and competing patents? What more instructive illustration could be found, except the whole free-trade policy of Great Britain, of the fallacy of political economy founded simply upon the individual interests of men and nations?

It is gratifying to observe that Mr. J. S. Mill, admitted to be the ablest living writer upon political economy, and a strong advocate of free trade, thus frankly admits the reasonableness of granting patent rights: "The condemnation of monopolies," he says, ought not to extend to patents, by which the originator of a new process is permitted to enjoy, for a limited period, the exclusive privilege of using his own improvement. This is not making the commodity dearer for his benefit, but merely postponing a part of the increased cheapness which the public owe to the inventor, in order to compensate and reward him for the service. That he ought to be both compensated and rewarded for it, will not be denied; and also, that if all were at once allowed to avail themselves of his ingenuity, without having shared the labors or the expenses which he had to incur in bringing his idea into a practical shape, either such expenses and labors would be undergone by nobody, except by very opulent and very public-spirited persons, or the state must put a value on the service rendered by the inventor, and make him a public grant. This has been done in some instances (as when Parliament offered a reward of £20,000 for a method of finding a ship's longitude at sea), and may be done without inconvenience, in cases of very conspicuous public benefit; but, in general, an exclusive privilege of temporary duration is preferable, because it leaves nothing to any one's discretion; because the reward conferred by it depends upon the inventions being found useful, and the greater the usefulness the greater the reward; and because it is paid by the very persons to whom the service is rendered, the consumers of the commodity."—Political Economy, vol. II., page 497.

[We shall continue these extracts until we complete the full report.

Cleansing Wheat.

About the year 1846 a Mr. Bantz invented and patented a process for "unbranning" and cleansing wheat. The object of the process, with its later improvements, is to remove from the grain of wheat, before grinding, the outer innutritious cuticle, and to leave only the nutritious part of the grain to be ground up. The process is based on a close scientific analysis of the structure of the wheat kernel, and takes off merely the thin outer layer or hull, leaving intact the layer immediately within, which is found to be rich in nutritious substance. The kernel of wheat subjected to this process comes out whole, clean, and of light color. It has lost its whole exterior coating, excepting in the deep crease which marks one side of it, and is freed from every impurity.

Besides the diminished liability to injury by heat or insects, in wheat thus prepared, a very remarkable gain is made in its usefulness. In the old process of grinding up the grain whole and separating the bran by bolting, a part of the good flour is carried off with the bran. A part of the grain which the chemist pronounces the most valuable, but which cannot be separated from the worthless hull by grinding, is lost. Bantz's process, however, removing the worthless part and that alone, leaves the whole of the rest of the grain for use and leaves it in a state, too, which greatly improves the quality of the bread made from it. The economical results of this improvement are remarkable. The matter is touched upon in the report of Mr. Tremenheere, who was appointed in England to investigate the grievances of the journeymen bakers, and reported in 1862. Mr. Tremenheere gives the statement made by the Messrs. Hadley, of the London City Flour Mills, who had experimented with Bantz's process. We make the following extract from their evidence:—

"By the ordinary mode of grinding the result obtained is 76 per cent. of flour for human use. By the new process we find, by a series of very careful experiments, extending over several months, that we obtain about 86 per cent. of the berry available to make bread. The money value of this increase of 10 per cent. is subject to a deduction of about one-half in consideration of the lessened quantity of offal, the value of which we may take at half of that of the flour, if used as human food. The offal is used for many purposes, which give it a value larger than would at first sight be conjectured. In addition to this net increase of 5 per cent. in value of flour available for human food, the flour made by this process, containing all the nitrogenous or nutritious matter existing in the portion of the berry hitherto lost, yields a large increase in the number of loaves per sack. From the trials which we have ourselves made, we are satisfied that that increase may be safely stated at 20 lbs. of bread per sack of flour. This, taking the common yield of a sack of flour at 90 4-lb. loaves, or 360 lbs. of bread, amounts to an increase of upward of 5 per cent. on the bread (18 lbs. would be exactly 5 per cent). The aggregate gain in flour and bread may therefore safely be stated at 10 per cent. There is another source of gain in a national point of view, in the increased nutritive value of the whole mass of the flour made by this process."

A company is now being organized in Boston for the purpose of using this process.

FOREIGN INTELLIGENCE.

NEW USES OF IODINE.—From the specifications recently issued, of a patent by Professor Hofmann, of London, we learn that a new coloring matter, which dyes silk and wool of a beautiful violet, blue violet, or red violet tint, has been produced by the application of iodine extracted from sea-weed. It has long been thought that if iodine could be used as a coloring substance it would be one of the most powerful known. The patented process consists of mixing in certain proportion the substance called rosaniline with the iodides of ethyl, methyl, or amyl. This dye may be used in the same manner as the aniline colors, and is already in the hands of practical people in all the manufacturing districts, and bids fair to be "the color" of the season. The use of iodine as a disinfector has also been noticed by Dr. Richardson, who states that iodine, placed in a small box with a perforated lid, is a good means of destroying organic poison in rooms. During the late epidemic of smallpox in London he has seen the method used with benefit.

A YEAR'S LABOR DEFEATED BY THE BREAKING OF A BAR OF IRON.—An unfortunate accident has just occurred in the studio of M. Dubray, statuary, at Passy. That artist has just terminated, after a year's labor, the model of an equestrian figure of Napoleon I., destined for the city of Rouen. The committee charged to report on the work had willingly accepted the statue, being satisfied that a sculptor had never been more successful. The Prefect of the Seine-Inferieure, attracted by the report of the committee, called on the artist to see the work, and the statue was being turned on its axis to exhibit it from different points of view, when the bar of iron by which the whole mass was supported suddenly broke in two, and the work was precipitated to the ground, rider and horse being reduced to a thousand pieces. It is impossible to depict the consternation of all present, but after the first emotion was passed, M. Dubray announced that he should commence that very day on the work of preparing a new model.

THE drains of Paris are declared to be the most wonderful work of the kind ever executed. Hundreds of hollow tubes, each one a marvel of solidity and skill, run from every quarter of the town to one immense receptacle of the filth and waste water thus carried off. Before the mouth of this hideous reservoir is placed a grating through which the mass of infection pours night and day. This grating is meant to prevent the passage of any object beyond a certain size, which might otherwise obstruct the tube. The police reports of the past year record the detection of more than ten thousand new born infants thrown at the moment of birth into the drains, which had carried them to the horrid grating, there to leave them to be gathered as the most damning evidence of neglect and abandonment.

A SUBMARINE boat propelled by compressed air has been built at Rochelle, France. It is intended to pierce an enemy's vessel under water, leave a combustible shell on her side, and then to discharge it by means of electricity as the boat retires to a safe distance.

M. GODARD, the aeronaut, has started in Paris a newspaper devoted to aeronautic subjects, and called *Le Montgolfier*. He is building a new monster balloon called *L' Aigle*.

IN the commune of Hure, near La Reole, France, is a vine loaded with 2,500 bunches of grapes, each being from eight to ten inches in length.

ANOTHER steamer, the *General Hunter*, has been destroyed by a torpedo on a river in Florida. It will not do hereafter to say that torpedoes are incapable of doing damage.

THE iron pavement so long in use in Cortlandt street has been removed, and is to be replaced by Belgian pavement. Frost disturbed the iron blocks and rendered them unsafe.