

LIMITED LIABILITY OF BANK STOCKHOLDERS.

The word "limited" is now a part of the corporate title of many of the English banks. Two years ago, the leading London banks did not pretend to any limitations to the liability of stockholders. It was on March 13, 1880, that the London and Westminster Bank of London registered as limited. Three other of the London banks, soon after followed. These banks, with their paid up capital and number of stockholders are as annexed:

	Capital.	Stockholders.
London and Westminster.	£2,000,000	5,645
National Provincial.	1,687,500	4,813
London and County.	1,500,000	4,513
Union of London.	1,395,000	3,862
London Joint Stock.	1,200,000	3,196
City.	600,000	967

All these banks are now registered as limited, except the Union of London and the London Joint Stock. It is said that propositions looking to limited liability will be presented at the July meetings of these two banks, and the chances are that they will be approved. The London Joint Stock would have adopted this feature before, but for fear of the loss of German patronage. From 1866 to 1872 the Union had a capital £1,200,000 in £50 shares, of which £15 was paid up. In October, 1872, there was an issue of 10,000 new shares, and the premium on this issue was added to the reserve fund. In 1873 the profits admitted of a capitalization of 10s. per share, and since then the amount paid per share has been £15 10s.

The history of the Union Bank of London is of interest. Since July 1, 1873, its capital has been £1,395,000. Up to 1872, the reserve fund was uniformly £300,000. From that time it was steadily increased until 1880, when it reached £600,000, which is the present figure. Its semi-annual net profits have varied from £89,700 in 1867 to £140,500 in 1882. During this period of 15 years the bank has had 4 off years, when the net earnings for the twelve months varied from £189,281 to £198,955. These periods occurred in 1867-68, 1869-70, 1876 and 1879. In other full years the net earnings have varied from a little over £200,000 to £281,600. These are magnificent figures for the amount of capital employed and the low price of money which generally prevails in London. It shows that the resources have been well and actively employed, and that there has always been a good line of deposits upon which to draw. The deposits of the Union have never been less than £10,000,000, and they have been as high as £15,000,000. What bank in the United States, with a capital of \$6,000,000, is able to attract from \$50,000,000 to \$75,000,000 in deposits? There is not a bank in the great city of New York that has a deposit line of \$25,000,000. The dividends of the Union have never been less than 12½ per cent., and only in 1876 and 1879 did they get down as low as that. Since 1874, with the above exceptions, they have been 15 per cent., and period to that year they were frequently as high as 20 per cent., and in 1867 the large rate of 25 per cent. was paid. —S. F. Bulletin.

THE ELECTRIC LIGHT.

The Edison Electric Light Company, which for the last year and a half has been preparing to light up its first district, bounded by Spruce and Wall streets, Nassau street and the East River, turned the current into Drexel & Morgan's offices at Wall and Broad streets yesterday, and the light may now be seen there. The light as seen in half a dozen lamps in Drexel & Morgan's office this morning, was perfectly pure, pleasant to the eye, and so much like gas in color that when covered by a ground-glass globe no one can tell whether it is gas or electricity. It is perfectly steady, and has none of the flickering sometimes due in incandescent lamps to the weakness of the engine which drives the dynamo. At any time after this week the houses having their lamps and meters in can use the light. Mr. Edison is at the station every day, highly delighted with the result of his two years' work, and studying out any obstacles which may present themselves. As a result of the completion of the Edison system, some of the persons who have introduced the new light have sent to the gas company which has been supplying them with gas, and requested that their meters be taken out, and their "motor deposit" returned, with interest. In some instances the deposit has remained with the gas company for twenty-five years. The receipt given by gas companies for such deposits stipulates that interest shall be paid, and many old receipts call for interest at seven per cent. —N.Y. Post.

THE NEW YORK STOCK EXCHANGE.

The New York Stock Exchange was founded in 1792, but its real history may be said to commence in 1820, when the preliminary code of rules received a thorough revision, and the organization was strengthened by the accession of some of the heaviest capitalists of the city. It is an unincorporated association, and its operations are limited to the sphere which its name denotes. It exists under an agreement between its members to contribute to the support of a "mart" in which each on his own account can transact his business and enter into negotiations and dealings with his fellow members in their individual capacity. In all these respects it differs from the Chamber of Commerce. It is distinguished from the latter exchanges mainly by the fact of its being a purely voluntary association, deriving its existence from a written constitution of its own, uncontrolled by charter or special legislative provisions. Like a corporation, it has a perpetual being, and in this respect it has an advantage over the "statutory exchanges" incorporated under the act of 1877, whose existence is limited to a period of fifty years, whereas the New York Stock Exchange can preserve its organization until it voluntarily dissolves itself.

But it is subject to disadvantages which do not attach

to legally incorporated bodies. It cannot sue or be sued in its own name. The title to the personal property is vested in all its members, and to avoid the legal difficulties with respect to the holding of real estate, the circuitous method had to be adopted of incorporating a company duly empowered to hold real property, the stock of the company being exclusively owned and held for the use and benefit of the Stock Exchange. But the features of resemblance between it and the later exchanges are very numerous. The organization grew out of the necessity for new and greater facilities for exchange and negotiation incident to the rapidly developing trade of the country. The sole source of its revenue is derivable from dues, fines and assessments collected from its members, together with the increase of its actual accumulations. Being an organization not constituted for gain, but for the convenience of its members, the possession of property is a mere incident, and not the main purpose or object of the association. Each member of the Stock Exchange is entitled to what is commonly called a "seat," which is transferable, but the transferee must be approved by the Committee on Admission. Analogous to these seats of the Stock Exchange are the certificates of membership of the other exchanges, which are in like manner transferable to eligible persons, and in case of death can be disposed of by the personal representative of the deceased member. In matters of government, as might naturally be expected, the recent exchanges have largely availed themselves of the principles and provisions adopted by the older organizations. The legislature, too, has drawn largely from the same source when framing the charters of commercial corporations and the recent act "To provide for the incorporation of exchanges or boards of trade." —Bradstreet's.

A NEW ELECTRIC MOTOR.

A Pittsburgh dispatch says:—An invention, which, it is claimed, will revolutionize the street railroad travel was successfully tested in the yard of the Union Passenger railroad company in this city recently. It consists of an electric motor designed to propel street cars, which has been recently patented by Dr. J. R. Finney, of this city. A car weighing six tons was used in the experiment. The electric motor was suspended below the level of the floor by a truss attachment to the truck. The only machinery in addition to the simple dynamo machine, rated at one and a half horse power, was a series of gear wheels by which the car wheel was made to revolve once in thirty revolutions of the motor, which propelled the car at the rate of ten miles an hour. The electricity is produced by a dynamo-electrical machine, located at any point, and is conveyed on a wire suspended a short distance above the car on brackets attached to arms extending from posts set at the side of the track. The current is led from this conductor to the motor by a contract traveler consisting of a grooved pulley, held loosely on the conductor by another pulley on the other side. The current is grounded through the wheels and rails, the latter having a continuous connection in order to make a more perfect ground. The traveler is drawn along the wire conductor by the car, and the pulleys are so adjusted that they pass over the brackets without breaking the contact, furnishing a constant and steady supply of electric power to the machine which it transfers into motion, just as the old-fashioned mill wheel converts the weight of water into motion and transmits through the proper gearing to the burrs, which in turn convert wheat and corn into flour and meal. The entire machine could be placed in a medium sized shoe box, and does not exceed three hundred pounds in weight. Even this weight may be greatly reduced, as the gearing is all unnecessarily heavy. The person in charge of the car can increase the power at will, even concentrating it all on a single motor if necessary. The current reversed will serve as a brake in going grades, and in this respect will be more effective than any other ever used. In addition to propelling the cars by electricity, Dr. Finney has designed electric lamps for lighting them, the power to be taken from the same conductor. A company with large capital has been organized to push the invention, and it will likely be adopted in the Union line before long.

IS THE SUEZ CANAL A DETRIMENT TO ENGLAND?

Not a few business men will agree with the recent statement made by Mr. William Rathbone, member of the House of Commons from Liverpool, that it is quite probable that the Suez Canal may prove detrimental to the purely local interests of England, and hence a disappointment to those who are now foremost in urging that due recognition should be given to its national importance. It is certain that when the trade between Europe and the Orient was carried on overland through Asia Minor and Egypt—that is, before the Turk got possession of western Asia—it served to enrich the trading republics of Venice and Genoa, and such commercial cities as Nuremberg, Ratisbona, Mayence, and Cologne, not to speak of others. The current of trade between the East and the West passed through them, for the wares brought from the East by ships to Venice and Genoa were sent over the Alps into Germany for the purpose of distribution, and by this route reached England and western Europe generally. The Turkish invasion stopped this trade, and with its stoppage came the decline in prosperity of the people who had thrived upon it. By the new route around the Cape of Good Hope, first the Portuguese, then the Dutch, and lastly the English got control of this trade. Before the canal was built a very large proportion of the merchandise of the East, which was ultimately to be consumed upon the Continent, came to England, and before going into consumption paid the English, as distributors and handlers, commissions in a variety of forms. At the present time a large part of the merchandise from China and India goes directly to the Continent, and English merchants do not receive a penny's

worth of benefit from it. On the other hand, the seaports of southern Europe, for centuries dormant, have, since the opening of the canal, prospered amazingly. They are now getting back a part of the trade which fell to them during the Middle Ages, when the commerce went overland. A large part of this business is done in English ships, but there is some reason for believing that the actual net profit to England of the entire Eastern trade is little, if any, larger now than when the business was held fast in English hands, though then its dimensions were much smaller. —N.Y. Times.

TWO PROBLEMS ON UNCLE SAM'S INCOME.

The official records say that during the past 20 financial years (1863-1882, inclusive, the years ending June 30) our general government received from internal revenues \$2,931,227,331, and from customs or duties, \$3,232,631,329, making a total income of over six thousand million dollars (\$6,163,858,660). This is a trifle over an average of three hundred and eight million dollars a year. Allowing for 54 Sundays, and the fraction over for the leap year, the average income of Uncle Sam for 20 years past has been almost exactly a million dollars a day for every business day. Calling the business day ten hours, this is a hundred thousand dollars an hour; \$1,666.2 a minute, or \$27.77 each second! It would take a good many clerks to simply count the money as it comes in, especially if they reckoned the odd cents. Two problems for the young arithmeticians of the readers of the *American Agriculturist*: The legal silver dollar weighs 412½ grains, and 7,000 grains make a pound avoirdupois. First problem—If the entire 20 years' income, given above, were in these silver dollars, how many wagon loads of silver would there be of a ton on 2,000 pounds each? Second problem—Taking the constant income, how often would a wagon be loaded with these silver dollars, that is, in how many minutes and seconds? —*American Agriculturist*.

EXTRAORDINARY FRAUDS.

The method by which Charles M. Hilgert, sugar refiner of Philadelphia, who lately absconded, managed to swindle his creditors and bankers out of about half a million dollars is described by the president of the Merchants National Bank in that city as follows:—People talk about the banks being easily fooled. They were not. The man was shrewd. He had all his notes made payable at his own office. He used the best names in the country, names that any amount of money would be advanced upon. He used a printed note. I have seen one of them, and it was in this wise: "John M. Hilgert & Co., printed with the address; on the end, 'payable four months after date' to, say, Brookmire and Rankings of St. Louis, so much money, &c., and then his signature. On the face he would stamp in colored ink, 'Payable at the office of John M. Hilgert's Sons,' and then underneath would write the payee's signature. By that means the note never reached the persons named as payees, and with such names as that, who would for an instant think it was a forgery. Why, I would have advanced any amount on it. He had six different kinds of ink, and would use one kind for a St. Louis house, and another for a house in Boston. But what a weight he must have had on his mind, for if any of the notes had reached the person in whose name it was drawn, the whole thing would have been discovered.

WEIGHT OF A MILLION DOLLARS.

Mr. E. B. Elliott, the Government Actuary, has computed the weight of a million dollars in gold and silver coin as follows:—The standard gold dollar of the United States contains of gold of nine-tenths fineness 25.8 grains, and the standard silver dollar contains of silver of nine-tenths fineness 412.5 grains. One million standard gold dollars consequently weigh 25,800,000 grains, or 53,750 ounces troy, or 4,479.16 pounds troy, or 5,769 grains each, or 3,685.71 pounds avoirdupois of 7,000 grains each, or 1,843.1000 "short" tons of 2,000 pounds avoirdupois each, or 1,645.1000 "long" tons of 2,240 pounds avoirdupois each. One million standard silver dollars weigh 412,500,000 grains, or 859,375 ounces troy, or 71,614.58 pounds troy, or 58,928.57 pounds avoirdupois, or 29,464.1000 "short" tons of 2,000 pounds avoirdupois each, or 26,307.1000 "long" tons of 2,240 pounds avoirdupois each. In round numbers, the following table represents the weight of a million dollars in the coins named:

Description of Coin.	Tons.
Standard gold coin.	1 1/2
Standard silver coin.	26 3/4
Subsidiary silver coin.	25
Minor coin, five-cent nickel.	100

Wood & Iron.—Despite the fact that this is proudly dubbed the age of iron, the *Bulletin of the Census office*, just published, setting forth the extent of the lumbering industry of the United States in 1880, shows that the prominence of wood in the economic affairs of men has not materially diminished. The enormous extent of this branch of industry may be judged by the aggregates for the United States. There were no less than 25,708 establishments, with a capital of \$181,186,122 and employing 147,956 hands, an army in itself. The value of logs was \$139,836,869; of mill supplies, \$6,318,516; wages paid during the year, \$31,845,974. The amount produced was, lumber, 18,091,356,000 feet (board measure); lathes, number, 1,761,788,000; shingles, number, 5,555,046,000; staves, number, 1,248,226,000; sets of headings, 146,523,000; spool and bobbin stock, 34,076,000 feet, and value of all other products \$2,682,668. The total value of all products was \$239,367,729. The rank by States according to value of products was for the first ten:—1 Michigan, 2 Pennsylvania, 3 Wisconsin, 4 New York, 5 Indiana, 6 Ohio, 7 Maine, 8 Minnesota, 9 Iowa, 10 Missouri.