

plied for them is supported on a series of grooved pulley wheels, supported in pairs by stout posts set into the ground; ordinarily these posts are about fifty yards apart, but the distances may be much further, and in one case on this very line, to accommodate the wishes of one of the landed proprietors, there is a span of 630 feet. At one end of the three-mile distance the endless rope passes round a Fowler's clip drum worked by an ordinary portable engine; at the other end it passes round a plain cylinder. An engine of 16-horse power, working at 10 lbs. of steam was able to drive the rope at a speed of four miles an hour. The rope employed is 1½ inches in circumference, or as ordinarily known, a half-inch rope; and its strength is amply sufficient to allow of carrying six tons at a time properly distributed over its length and driven at the rate of five or six miles an hour. The boxes carried on this line are about 2 feet long, from 1 foot to 13 inches broad, the inner side sloping away outwards from bottom to top; and six inches deep. Their load of stone is 1 cwt. each, taking the number of supporting posts as 120, some 240 boxes can be on the line continuously in constant motion. The carrying power thus becomes, at this five-mile speed of the rope, ten tons per hour delivered at the destination. The wire line being endless the empties are returned to the loading station or quarry at the same rate as they are sent away. The boxes are not clipped or fastened on to the rope, but simply adhere to it in this way:—From the box itself two upright stanchions, about a yard long, pass upwards, and are bent over at top for about a foot of their length, and attached at their extremities to a short solid square block of wood passing between them, and arched out beneath to lie upon the rope. Sheet iron flanges are also put along the sides of the block to make its retention on the rope the more secure. The box hangs thus on the rope, with its own gravity always under the line, and its adhesion to the rope is sufficient to ensure its travelling up to the bearing pulleys, when there are even very large amounts of slack in the rope. The carrying power can be of course increased by increasing the dimensions of the rope, in fact it can be varied to any extent to suit particular requirements from 10 to 1,000 tons per day. Where the traffic is heavy it is proposed to use a double line, a stout one permanently stretched to bear the load, and a lighter endless rope for hauling.

The most marked advantage of this system is its economy and practical application in districts and under circumstances where railways could not be remunerative on account of the limited amount of traffic and the great cost of the engineering works of the road. By the use of the tramway system any country, however rugged, can be crossed with a line capable of its continuous and evenly distributed labour of accomplishing a large total result per day, and without involving much more engineering work than a line of electric telegraph, the traffic line being constructed on posts or pillars, without bridges, tunnels, embankments, or masonry. As an example of the saving to be effected by this system, we may instance the circumstance of a mine at the Cape of Good Hope, a consideration of the enormous difficulty and cost of transport of the produce of which first turned Mr. Hodgson's attention to the present subject. Here we have 10,000 tons of ore output, the cost of which for transport to the market, and of coals brought back to the mine is £50,000, the distance of carriage being over 80 miles, and mainly by mule and bullock waggons. Moreover, the time occupied is so long that, reckoning the value of the ore, the expenses of labour in getting it, and the maintenance and expenses of carriage, there is said to be as much as £120,000 capital sunk before any realisation of the outlay is obtained. It is easy to see how a wire rope line divided into manageable lengths and worked by connecting drums and stationary engines, would be a most profitable as well as a most convenient carrier; the boxes being able to pass the sharpest curves by running on wheels over short lengths of small rails, and taking the wire rope again by running on to it when the curve was passed. The boxes, or cars, are at first run on to the rope in the same way from the quarry or loading station; and they are also thus run on to the rail sidings at the deliverer's terminus, or they may be tipped there of their contents and continue their journey back empty for reloading without interruption. Even on so small a scale as the wire line at Leicester the system has already received favourable consideration from the local public authorities, who regard the saving of wear and tear to the highways and roads as not less than £100 a year. The granite traffic from the Markfield quarries involves a capital outlay in carts and horses of upwards of £20,000. The cost of the wire rope and its machinery is £12,000, and the work it is capable of performing is obviously far more constant and economic than living horse power. The system is being commercially developed by a private company in London, under the title of The Wire Tramway Company.—*Iron Trade Circular.*

ENGLISH AND AMERICAN MODES OF BUSINESS.

At point of language, religion, laws, general observances and domestic habits, there is so much resemblance between Englishmen and Americans that no difficulty is experienced in identifying them as descendants from one common origin; but there is so great a difference in their modes of doing business, and their ideas of the way to operate, that they are in the antipodes of each other. On the one side every thing is done with excessive caution, mature deliberation, long and frequent discussions, and not until the opinions of certain experts are fully ascertained. Capitalists embark on new and untried enterprises with reluctance and misgiving. They seem to regard it as quitting the substance to grasp at the shadow, and by the time their minds are fully made up to grapple with chances, the whole thing would have been in active operation in America, and the parties interested either made or lost by the undertaking.

There is more dash and active energy on this side of the Atlantic; but there is more soundness and persistent determination on the other. Each one, to a great extent, correct in his own sphere. When a man falls in England, he rarely ever finds opportunity to recuperate and regain his former standing. In the United States, thousands of our most prominent business men are those who have gone through the furnace of bankruptcy not once, nor twice, but several times, and each singeing seems only to have given them additional energy and experience. In England the field of operations is cramped and over-crowded. When a man "goes under" there are hundreds ready to fill his place, and no available opportunity is given him to raise his head above water again. Society is so constituted, that to accept a lower situation, and attempt a new start, would be equal to perfracting self-imposed taboo or life-long servitude. Unless a business man inherits capital in England, the major portion of his life's voyage is over before he can possibly acquire it; if he is not favored far beyond the lot of his fellow millions. To lose all, after the meridian of life has been passed, in a country so crowded, and amidst society so rigid in its conventionalities, is to abandon hope. Our enormous expanse of country; its great diversity of climates and employment; the vast fields open to energy, business tact and industry; the total absence of those antiquated ideas which condemn a man as incompetent to transact business unless he be of a certain age; the entire freedom from any sense of degradation in beginning anew at some more humble occupation, and the many living evidences that men of advanced years have acquired large fortunes long after their heads were silvered, contribute to make the American much more reckless and impetuous in his business relations. What though he "breaks" three or four times? He feels that in this country, while there is life there is hope and opportunity. The events of a single week may transform him from a comparative beggar to a millionaire. Realizing this, he is more apt to rush boldly, and perhaps blindly upon untried ventures, while the English operator is either compelled to follow in long-trodden grooves, or be shunned as a dangerous, fifty-innovator. Each system is fairly adapted to its own country. It would be as foolish for an American to undertake such enterprises in London as he would in San Francisco, as it would be for a Londoner to venture blindfold on the apparently reckless style of operations in vogue here. Extreme caution, great discretion, and mature reflection are indispensable in England, but if carried on to the same extent in this country, we should leave little room for the race, and would be like a fossil, and soon find himself neglected. In lieu of the qualities regarded as sterling among Englishmen, we substitute judgment, quick discernment, ready decision, with her right or wrong, and prompt execution. If these fail, we pick our risks and try again. If these fail, we repeat, whereas, his brother across the Atlantic carries but a single chance. If we were to favor our adventurous and too hopeful method with a little British precision, and if they would only season their dilatory and minute calculations with a sprinkling of impetuous dash, we believe it would be better for both. We have the speed, but they hold their grip. We hunt down the game, but they keep it fast—when they arrive in time. We invent, but they utilize to greater extent than we have done. We regard them somewhat as a vigorous youth of twenty-five would the staidness of eighty years. They look upon us with the lofty consideration which experienced men vouchsafe to unguarded youth. Both are partly right and partly wrong, but by observing each other more carefully and discarding the objectionable features of each, we can mutually arrive at a better and more satisfactory business understanding.—*San Francisco Review.*

THE WOOL TARIFF.

PRESIDENT GRANT in his inaugural said:—"I know no method to secure the repeal of bad or obnoxious laws so effective as their stringent execution." The incongruous act of March 2nd, 1867, is now "executing" itself. By a recent decision of the Treasury Department, fine East India is classed 3d, and pays the lowest duty. The same ruling applies to Angora and other fine E. differential wools. It is also decided by the Department that Scotch laid wool is not a combing kind, but belongs to class 3. There are also decisions that English head-wool and Canada clippings are combing, and should pay duty as class 2. There are other decisions equally paradoxical. The "act" is now much for the lawyers of the Treasury Department, but as lawyers they construe the law, and decide that fine wool is coarse, and short wool is long.

The law has been so difficult for merchants to understand that they feared to import, not knowing whether they would have to pay three cents or ten cents, and eleven per cent on doubtful classes—hence, the imports during the past two years have fallen off heavily, and the Treasury has realized but very little revenue.

Chilled clothing wools are clearly prohibited, and as they are not grown in the United States our manufacturers are compelled to work without them. This is one great reason for the inferiority of American cloth; without the various kinds to make proper blends it is impossible to make superior cloth.

The present law has thrown back the character of American manufacturers in cloth and cash-meres. The farmers and wool growers have not been at all benefited by it. Wool-growing to-day is no longer profitable business to the agriculturist, nor can it be made to pay in our cold climate.

Wool of all kinds should be admitted duty free, or at a nominal tariff, and all classes would be benefited thereby, more especially the people who wear woollen goods and have to pay for them three or four hundred per cent more than the same kind cost in Europe.—*Dry Goods Reporter.*

THE CERTIFICATION OF CHECKS.

THE bill forbidding the certification of checks by the National banks, except where the check is covered by an equivalent deposit, has become law. The measure is not of any great importance to the mercantile community, who rarely have to ask for a certification. To the large number of dealers in stocks, bonds, and gold it is, however, a matter of the utmost consequence. The broker is not to be expected to keep constantly in bank a deposit equal to the amount of his daily transactions. When, therefore, he gives a check for a large amount in payment for securities, the receiver, knowing perhaps little about the standing of the broker, requires that the check be certified as "good;" and the bank then accepts the responsibility of the check, relying upon the drawer to make it good from his receipts before the close of the day. It is easily seen that without some such facility, it would be almost impossible to transact the immense business of Wall Street.

The banks doing Wall Street business have no alternative between substantially evading the law, or allowing some of their best accounts to go to private bankers or to the banks operating under the State system which are subject to no such restriction. The result, therefore, is that while the old form of certification is discontinued by the National banks, yet by other methods the same accommodation is extended to the brokers as before the adoption of the new law. In cases where a broker has accounts with more than one bank, in order to provide the deposit required by the new law, he draws a check upon bank A, which bank B accepts as a deposit without being certified, and against this deposit he draws a second check upon bank B, which the latter bank certifies. Some of the banks instead of indorsing their customers' checks according to the usual method of certification endorse them "accepted," which virtually constitutes the check as endorsed an acceptance.

In other cases, the banks grant a credit to the customer, which, being placed to his credit, constitutes a deposit against which he draws, receiving the certification of his check within the term of the law. These are the principal methods resorted to for the purpose of evading the law; and the banks must be regarded as unquestionably justified in adopting these expedients. The law has no plea in necessity or otherwise, and appears to have been adopted wholly on the recommendations of the Comptroller of the currency; recommendations urged upon the most ridiculous and erroneous arguments, that certification tends to inflation and involves the creation of a fictitious capital. A Comptroller who knows no better than to give such mistaken counsel needs to learn the common apprenticeship of a bank clerk, for he is ignorant of the very alphabet of banking.—*United States Economist.*

A recent suit against an insurance company before the Supreme Court of Missouri led to a decision of wide interest. The company requested payment of a loss, on the ground that the application for the policy did not give accurate answers to questions concerning the character of the title to the property. The holder of the policy responded with proof that he had made a frank and full statement of the facts to the company's agent, when he was soliciting the insurance, and that after this statement the agent, saying he made no difference, filled in the accurate answers in the application. The court held the company responsible for this action of its agent, and required the payment of the loss. The principle thus established is of wide application, especially in life insurance companies, whose agents are often tempted to the sin over doubtful circumstances concerning the health of applicants of applicants, in order to secure the issue of the policy.

NEW YORK MARKETS.

NEW YORK, March 24.

Cotton steady at 23½c.
Flour active; receipts 4,630 barrels; sales 7,500 do at \$5.45 to \$6.00 for Superfine State and Western \$4.10 to \$4.65 for Common to Choice Extra State \$4.10 to \$4.70 for Common to Choice Extra Western No. 4 quiet.
Wheat opened a shade firmer and closed dull; receipts 2,500 bushels; sales 10,000 bush at \$1.42 for No 2 Spring in store and delivered; \$1.60 for Amber Michigan; \$1.50 for White Canada.
Rye dull; sales 2,000 bush Western at \$1.31.
Corn firmer; receipts 710 bush; sales 45,000 bush at 65c to 67½c for new mixed Western, 90c for old M & W Western delivered.
Barley quiet.
Oats quiet; receipts 1,300 bush, sales 35,000 bush at 74c for Western in store, 74c to 75c for railroad depot and afloat.
York firmer and quiet at \$31.00 to \$31.75 for new Moss; \$30.75 for old Moss.
Lard a shade lower at 14½c to 15½c for st. m, and 15½c to 15½c for kettle rendered.

LONDON MARKETS.

LONDON, March 24th, P.M.

Bonds quiet. Stocks quiet. Erie 24½. Consols 91 for money; 93½ for account. Refined Petroleum 8½d. Tallow 46s 3d.

LIVERPOOL MARKETS.

LIVERPOOL, March 24th, P.M.

Cotton active and an eight higher; Uplands 14½ Orleans 12½. Broadstuffs green. Corn, 6s for old, 5s 8d for new.