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TRADE MARKS.

It is not unusual for a firm to bring suit against trespassers on their right to a distinctive trade mark by which their productions may be designated and recognized. The use of trade marks and peculiar devices for giving a distinctive mark to goods of a firm or an individual is quite old, but has of late years been more extensively used in this country than heretofore.

Upton says:—"A trade mark is the name, symbol, figure, letter, form or device adopted and used by a manufacturer or merchant, in order to designate the goods that he manufactures or sells, and distinguish them from those manufactured or sold by another; to the end that they may be known in the market as his, and thus enable him to secure such profits as result from a reputation for superior skill, industry or enterprise." Property in trade marks, exclusive and absolute, has existed and been recognized as a legal possession, which may be bought, sold, and transmitted, from the earliest days of recorded jurisprudence.

As the true interests of manufactures and commerce have been more perfectly developed and more fully understood and appreciated, it has been found that an exclusive property in trade marks and its adequate protection by courts of equity not only imposes no restraint upon the freedom of trade, but that its tendency is to promote and encourage that laudable competition in which lies the true interest of the public.

The love of possession, the proper pride in our own production, the desire to preserve a character for fairness, honesty, and straight-forward dealing as a defense against the attempts of swindlers, are adequate causes for the adoption of some peculiar and individual symbol by which one's handiwork may be known. When the order of masonry numbered among its votaries only those who were practical craftsmen each man had his own cipher which he cut into the choice stones that formed part of the edifice he helped to build. The old structures scattered all over Europe bear in their walls thousands of these monograms, evidences at once of the workman's pride in his art and his desire to write himself down a competent workman.

A similar pride of occupation and honest vanity of success moves the modern manufacturer to adopt some peculiar symbol as a sign of his honor and a surety to the purchaser that he gets what he intends to buy. That the producer has the sole right to this symbol is indisputable. Its recognition is not only a defence of his character for fair and honorable dealing but a protection to his patrons. So it has come to be the well established doctrine that the exclusive property of the manufacturer or merchant in his trade marks is of that nature and character that its adequate protection and security by the highest power of the courts, is an imperative duty as well for the safety of the interests of the public as for the promotion of individual justice.

Trade marks were formerly representative characters, being the name of the manufacturer with the place where made and the quality of the goods, or a similar device, and thus were as legible to the uninitiated purchaser as to the maker. But within a few years there has appeared to be a general disposition to copy the usages common centuries ago, and to adopt some arbitrary and irrelevant character or symbol. Thus we see griffins, sphinxes, and other fabulous monsters adopted to designate the products of firms, as well as monograms formed of legible characters and also of untranslatable ciphers. Yet in whatever form, these marks are as undeniable property as any other possession, and to the conscientious manufacturer a trade mark becomes in time an exceedingly valuable possession, giving him an immense ad-

vantage over the producer of an inferior article, while it is a guaranty to the public of genuineness.

QUALIFICATIONS FOR PUBLIC BUSINESS.

The important question of reform in the mode of appointment and tenure of office in the civil service, is again before Congress in the bill of Mr. Jenckes which proposes to subject all appointments and promotions to the test of a competitive examination of candidates as to fitness. Every branch of the civil service would thus become a profession, in which permanent position may be secured by studious fidelity, and promotion and distinction by perseverance and excellence. The reform demanded is in fact vital to the existence of our government. Under the present system of party corruption, it is only a question of time when the organization at Washington will become as rotten as that of this city, and as much more intolerable as it is more extensive.

By way of illustration and example, the conditions affixed by the Government to appointment to the telegraphic service in India, happen to lie before us in a late English paper, and will be found rather striking in contrast to the looseness of our appointments of all kinds. Among the primary conditions of nomination are a medical certificate of a constitution sufficiently vigorous to withstand exposure and fatigue in a tropical climate, and a certificate of past good character and conduct. Then follows the intellectual examination, involving 300 marks (minimum of 200 good) in English reading and writing from dictation; 250 each in English, Roman and Greek or Indian history; 350 each in Indian and general geography; 500 each in arithmetic, algebra and geometry; 750 in plane trigonometry, etc; 250 each in mensuration and book-keeping; 500 each in Latin, Greek and some modern foreign language. After passing this examination satisfactorily, the nominee will be required to give a bond with security for the fulfillment of the future conditions. He will then join a physical class for the purpose of qualifying for a final examination in chemistry, electricity and other sciences related to the telegraphic art. If found duly proficient in physics, he must then join an authorized telegraphic engineer and receive full instructions in the practical details of construction, testing, etc. Having mastered all these conditions to the satisfaction of the examiners, he will be furnished with his passage expenses to India and will join the telegraph department as a fourth class assistant superintendent at a salary of £240 or a little over \$1000 per annum. Among us, a youth expects something like that salary, who has been in a telegraph office two or three years and can barely read and write, but not spell, and who could not for his life tell whether he was transmitting correctly or not the name of one foreign locality in a thousand. It should be added, however, that the English papers ridicule unmercifully the official arrangements for practical training, and show up the ignorance and inefficiency of the whole past administration of the telegraph system in India in a most humiliating light.

INGENIOUS BULL.

The Englishman's chronic and comical despair of any way to stop a railway train on emergency, is explained partly by his repugnance to that open democratic fashion of doing things which is the best security for general good behavior—he calls this dignity, privacy, and what not—and partly by his dogged reluctance to submit to a new evil however slight, in getting rid of an old one however serious. Lest somebody should stop a train for fun or mischief, without detection, the English people endure the constant risk and occasional experience of robbery, rape and murder on their trains, not patiently only, but proudly. All the discomforts and outrages they suffer appear to be sauced perfectly to their taste by the always repeated conclusion that "Englishmen never can descend to the promiscuous American fashion of traveling," which is the only known condition under which an engine bell cord can be safely placed within reach of every passenger.

The long debate on all sorts of remedies for this deadlock between the right of exclusiveness and all other rights and interests of human nature, is only less amusing to plain easy people in America than the old absurdity around which it circles. Invention never begat another such series of fantastical suggestions as have beaten the British brain for a quarter century past. For example, in turning over an old volume of the *Mechanics' Magazine*, the other day, we recognized our friend, Captain Norton, in the act of propounding to the British public his plan for communication from the guard to the engine driver by means of a bow and arrow. His arrow was to be tipped with a squib to explode on falling, and to convey a variety of signals by colored fire. The advance from this to the latest invention, described in our London letter a few weeks since—that of torpedoes to be thrown upon the track—can perhaps be appreciated by the discriminating reader.

No, there is a later contrivance, tested in the presence of railway dignitaries, and described in the *Times*. It has so much the advantage of previous inventions in point of practicability, if not of outlandishness and absurdity, that we may presume John Bull feels he has hit it at last. It is patented. By converting the ordinary passage ticket into a mild sort of infernal machine, tipped with a chemical igniting compound, each passenger by inserting the tip in a slit over his head, can have the satisfaction of firing off a rocket from the top of the car, and of displaying a colored light in the same position for some minutes, whenever he feels like taking the responsibility. And the responsibility is not easily to be dodged, without going to the expense of an extra ticket: that is, until some curious chemist has had

time to discover the composition, so that it shall become accessible to anybody who wants it. For, mark you: if the engine driver happens to hear the noise and to look around, he can probably tell which car carries the portentous signal; after the train is stopped, examination will discover over what compartment the signal was fired; and finally the guard will unlock the very crib in which you are confined, and if you are already garroted or worse, the case will be perfectly clear, and even if otherwise, the disfigurement of your ticket, if the guard can find it, or if you have not taken the precaution to provide yourself with an extra one, will reveal the individual for whose accommodation the train was brought to. On the other hand, if you have taken the proper precaution, you can now get out unchallenged at the precise spot where the directors would have placed a station if your convenience had been uppermost in their designs. We think John Bull may properly cry *Eureka* at last.

GEOLOGY OF NORTH AND SOUTH AMERICA—PROFESSOR AGASSIZ' LECTURE.

The first lecture of Prof. Agassiz' course on South America before the New York Association for the Advancement of Science and Art, was delivered to a large audience on the 5th of February. In substance it was a general statement of the geological origination and structure of the continent, North and South, with a somewhat too hurried elucidation of the general principles of geology through which its history is revealed.

A remarkable analogy was traced between the geological histories of North and South America, each revealing three grand structural epochs, three successive upheavals of the crust of the earth, and three continental walls thus successively erected in the form of a triangle. In both divisions, this triangular framework stands in about the same position, like an italic V, as we view the map, with its open top closed. The side first erected, in both cases, was the northern, extending from east to west, constituting the northern (central) United States, British America, etc., in the one, and the plateau of Guiana in the other.

The vast contraction of the crust of the molten globe in cooling and thickening progressively—beneath the boiling ocean which still cooled it and still by its increasing coolness was more and more condensed upon it from the enveloping vapors—this tremendous contraction could not but cause the violently compressed mass within to burst its shell and make room for itself, wherever the shell was weakest. At the same time, the cooling and contraction going on upon the exterior surface of the crust while the interior surface still lay half fused upon the molten mass within, necessarily parted the exterior surface in great fissures, weakening the crust and permitting a grand upheaval along the line of fissure to relieve the pent and laboring ocean of fire beneath. Precisely in accordance with this effect we find the crust disposed in many mountainous districts, of which the Jura is a beautiful example. Passing over successive mountains and valleys varying thousands of feet in elevation, we trace one undulating crust of identical rock throughout, but broken at the summits and falling off each way like the roof of a building from its ridge.

It is worthy of remark that the oldest upheavals in the northern parts of North and South America respectively, appear to have been broader, less violent and less sharply defined, while the later upheavals have been narrower and loftier, and the latest, narrowest, sharpest and loftiest of all. This is what would naturally result from the causes above stated. In proportion as the crust of the earth was younger and thinner, in the earlier stage of its contraction, the inclosed molten contents would lift and stretch the yielding superincumbent crust in vast tracts, and thus make room for themselves with less difficulty and convulsive violence. Hence the oldest system of hills in both parts of the continent, is altogether the lowest: not to speak here of the longer continued abrasion, which but partially accounts for their more rounded form. Afterward, when the crust of the earth had grown much stronger, and contracted upon the molten world within with greater power and persistency, the force beneath accumulated until it burst up the crust with great violence under the line of an exterior fissure or rather series of fissures, extending northeast to southwest; and the second great wall, the Alleghanian system, then a vast promontory dividing the North Atlantic from the North Pacific, was erected. Any one who ever noticed the series or system of fissures produced by contraction in a solidifying surface, irregularly huddled, and yet running generally in one direction, may observe just such another system in the mountains on the map of our Atlantic states. (It is but fair to remark that we are not attempting a report of Prof. Agassiz' lecture, but a sketch of his leading points, with explanations and amplifications designed for the instruction of our readers, for some of which he is not responsible.)

At the same time with the Alleghanian system—as proved by the cretaceous formation abutting upon the primitive rock alike in both regions—the plateau of Brazil rose above the water, forming in like manner the southeastern wall of South America, and dividing the South Atlantic from the South Pacific. North and South America, at this time, were two great L-shaped islands, with the ocean flowing unobstructed all around and between them, and in their then form incapable of embosoming a basin of productive land for the sustenance of organic nature and of man.

The next step in the task of Providence was to throw up a third barrier which should complete the necessary enclosure. After a contraction of the now strengthened crust, far more persistent and tremendous than it had ever before been capable of, a fissure system was opened on the exterior surface which may be traced on the map through all its intricacies, in the branching and interlacing of the mountains all the