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THE GENESIS OF INVENTORS.

In the symbolic representation of the ages, the characteristic human type of one period is the hunter; of another, the shepherd; of another, the farmer. At one stage of the world's development, the soldier is the prominent man, at another the priest. Now the leading man is the builder; now the adventurous sailor; again the studious philosopher, the far-seeing patriot, the irrepensible reformer, is the commanding spirit of his time.

Of the nineteenth century, the typical man is the inventor. He is at once the leading factor and the peculiar product of modern civilization. He it is that has introduced the elements which chiefly distinguish the life of to-day from that of any and every other period. The hunter, the farmer, the soldier, the sailor, the priest, the philosopher, the statesman, the artist—each fulfills his function; but in no way do they surpass the achievements of other ages, in no way do they help to make our life different in kind or different in character from the lives of our ancestors. The work of the inventor does.

Subtract from the means and methods of our daily life all those elements which are or have been patented, or are the products of patented applications and appliances, and how much—how everything, in fact—that gives distinction to our age will be taken away! Pull out from our houses all the parts save those not now or ever patented, all those that have been formed or put together by patented means, and what a wreck would be left! Take from our tables all the articles, food, and furniture, in whose production and carriage patented inventions have been essential, and how meager our diet would be! Strip from our bodies every article of clothing save those in whose preparation patented inventions have not been employed, and how scant would be our attire! Deprive the wealthy of all the luxuries which invention has brought within their reach, the poor of the comforts and conveniences which the inventor has provided or made possible, and how much of use and enjoyment would go out from their lives!

Just now we are commemorating the brave deeds, the unconscious heroism and wisdom of the founders of our Republic. In no respect can it be said: "They builded better than they knew" than in the provision they made for the encouragement of invention and protection of inventors, then, like themselves, a slender and struggling band of pioneers

on the border of an unbroken continent, a new and unexplored field of effort for the amelioration of human existence. It was not a matter of climate or race, it could not be the conditions incidental to the conquest of a new country, that made the Yankee an inventor above all other men. The same race had undergone similar experience before, perhaps a score of times, yet it did not develop inventors except sporadically. It was not necessity, the reputed mother of inventions, that started our fathers on the course which has wrought a revolution, a multitude of revolutions, in the productive arts. The original need of labor-saving devices in America was no greater than had prevailed the world over since human life began; always and everywhere humanity has stood in want of the beneficent products of the inventor's art, and everywhere it has stood ready to turn such products to good account.

Why then were not more inventions made? Simply because the true parents of invention—encouragement of inventors and protection to their productions were lacking. Those provided, their legitimate issue followed, genius for invention was developed, and its progeny increased in geometrical progressive. Every new contrivance gave birth to many, inventive competition set in, and ultimately improvement became watchword the in every department of productive labor.

It is true, the student of pure science comes in for a share, a large share, of credit for making modern life what it is. Very largely he has led the van of discovery and made invention possible. But it must be remembered that it is their practical application that gives material value to such discoveries; and that where such applications are not directly favored, the progress of pure science contributes little to the advancement of human well being. In Germany and in England, the progress of scientific discovery is very rapid, yet invention lags. In this country invention leads, and frequently we take from them the barren scientific fact and return an application which gives it the highest value. It cannot be because the Germans have little inventive genius or practical skill, that they invent so seldom. They turn inventors quickly enough when they come here; an examination of the latest weekly index of inventors, containing some 250 names, shows that fully twenty per cent of those are unmistakably German. That a large percentage of our inventors are of British birth is too well known to call for investigation.

The secret of the superior inventiveness of the Americanized European lies in the fact that here his efforts are encouraged, there systematically repressed. Here we know the inventor's value, and appreciate him accordingly. We know that a fertile soil gives us far less advantage in the markets of the world than the time-saving and labor-saving implements which enable us to win our agricultural products easily and quickly—implements which we owe to our inventors. We know that our commercial superiority and the immense development of our manufactures rest very largely upon the genius and labors of inventors. But a little while ago England led the world in these departments of human activity. To-day her foreign and coastwise commerce falls below ours by an aggregate of over ten million tons annually; while our manufacturing establishments, notwithstanding high priced labor and the predominance of machinery, give employment to nearly a million more operatives than those of Great Britain. How many of our six and half million mechanics could pursue their labors in default of patented inventions? How much of the five thousand million dollars worth of manufactured products, which they turn out a year, would be possible without the inventor's aid? We know our indebtedness to inventors, we welcome them as public benefactors, as prime factors in our industrial system; we protect them in the development and application of their ideas, and reap our reward.

In Europe the contrary custom prevails. In Switzerland and Holland, the inventor is refused any property right in his invention whatever; in the other States, the right is granted as a favor and weighted down with costs and conditions. The inventor is treated as an invader of vested rights, an enemy to trade, a disturber of the peace of the community. The good he may do to the multitude is less considered than the inconvenience he may occasion a few manufacturers by compelling them to improve their wares or cheapen their prices. Patents are regarded not as mainsprings of mechanical progress, but as "fetters" imposed upon industry, as "dragnets" spread to entangle manufacturers and curtail the area of their operations. The rich manufacturer, satisfied with his plant and his profits, calls the poor inventor a "nuisance" or "gambler," who, "instead of contenting himself, like other men, to work and accumulate money by industry, is always scheming, and dreaming, and wasting his time and his money." If successful he becomes sometimes worse than a nuisance. The Lord Chancellor of England, expressing the feeling of the dominant classes of Europe as well as of Great Britain, calls him by implication a black mailer, a sort of mechanical pirate, who robs the manufacturer when he can, and hampers him when he cannot rob; and the leading journals, like the Times, rejoice at every prospect of reducing the number of patents and patentees as a relief to productive industry. Under such condition it is no wonder that inventors as a class do not thrive, or that they bring their inventive talents where they are appreciated.

DEATH IN THE SALT CELLAR.

We are not of a morbid turn of mind; as a general rule, we believe that there is nothing to be gained by constant meditation on the uncertainties of human existence; but occasionally something occurs which reveals death lurking in some unthought-of ambush, which presents the idea of mortality in a form which fairly startles one into somber reflection.

If a boiler blows up and kills its attendants, or a sailor is drowned, or a miner suffocated, the circumstance, though we deplore it for the time, leaves no impression on the mind, for it is tacitly expected; but when an hotel full of people, as at a prominent watering place last summer, began to die off like sheep, killed by the water which was necessary to their existence, or the pedestrians in a public street are suddenly hurled to the ground by an explosion of presumably harmless objects, or a bit of color in wall paper or dress carries disease or death, then we are forced into the disagreeable belief that our lives are our own only in a very limited sense.

We have been led, perforce almost, into this train of thought, by the realization of how closely the community has escaped a calamity which might have carried mourning and death into hundreds of homes. The Niagara, a large sailing vessel of the Anchor line, recently reached this port from Liverpool, after a stormy passage of thirty-three days. The cargo of the ship consisted of 1,950 bags of salt of the finest quality, such as is sold for table use. This filled the hold, and the 'tween decks space was devoted to chemicals and general merchandise, the former including about a hundred kegs of arsenic. During the bad weather, the cargo shifted, the arsenic kegs broke adrift, and, pounding against the ship's side, speedily became sufficiently injured to allow of the leakage of their contents. Meanwhile the seams of the vessel, opening, admitted water, and this, mingled with the arsenic, poured down into the salt.

On the arrival of the ship in New York, the chemicals, etc., were taken out in damaged condition, and then the salt bags were removed and delivered to the consignees, who in course of trade lost no time in disposing of the salt, or rather of a portion of it. At this late hour, the thought occurred to the captain of the vessel that the arsenic solution might have poisoned the salt; and acting thereon, he at once telegraphed far and wide to stop its sale and consumption. Professor Doremus was sent for to analyze chemically the material; and from his report, based on the examination of a large number of samples, it appears that the arsenic was present in such considerable quantities as to render the salt utterly unfit for use for any kind of food.

It is stated that the warning has been given in sufficient time to prevent the sale of any of the poisoned substance, the telegrams reaching the parties before the salt itself. But the contemplation of what might have been the result, were such not the case, is enough to cause even the most indifferent to shudder. The salt is said to be still of use for manufacturing purposes, and hence will not prove a total loss. The question of value, insurance, etc., is the gist of a triangular fight between the custom house people, the insurance companies, and the owners; and here we suppose the matter will end. It seems to us, however, that it should not be allowed to drop here. The fact that the lives of perhaps hundreds hung on the memory of one man, and that it was nothing more than mere luck or chance which caused that individual to bethink himself in time, is entirely too serious to be passed lightly by.

The public would like to know who is responsible for such criminal stupidity as the stowage of a terrible poison in a locality where, even by the merest limit of possibility, it could get mixed with a staple article of food; also whether it is customary to pack arsenic in vessels capable of smashing by rolling about the decks. There are plenty of laws regulating the sale of poisons; it might be well, if such are not already there, to embellish the statute books with laws governing their transportation.

THE AGRICULTURAL DISPLAY AT THE CENTENNIAL.

A circular signed by the Chief of the Bureau of Agriculture of the Centennial Exposition, Mr. Burnet Landreth, has recently been issued, directing public attention to this very important portion of the national exhibit, and requesting, from agriculturists generally, aid to ensure its completeness. As the time in which the labors of the Bureau must be perfected is now less than a year, we need hardly point out that hearty practical coöperation is what is wanted from the public, and not mere approval of its ends and purposes. As we have already strongly urged, the period for discussion regarding the Centennial has gone by. The project is to all intents well matured, and is being carried into execution as fast as circumstances will admit. The way to accelerate its progress, therefore, is for each individual to make up his mind as to the part he proposes to take, and to set about preparations at once; or if he is not interested in directly participating, but yet is sufficiently patriotic to desire lending to the show his best aid and comfort, now is the time for him to consider how many ten dollar bills he can afford to withdraw from his business or income to exchange for shares of stock. The investment is said to be a safe one, and the managers of the Exposition believe that a handsome dividend will be returned. Regarding preparation of exhibits, it may be well for farmers to remember that, if they propose displaying specimens of crops, such must necessarily be of the present year's harvest, and sown during the present spring, so that the dressing of the soil, selection of seeds, and other especial cares must be attended to now. Live stock intended for exhibition will also require early attention, although this class of the display will not be exhibited until the months of September and October of next year. The Bureau publishes the following information regarding the time allotted to the various varieties of animals, etc. Horses, mules, and asses will be exhibited, as one group, from September 1st to 15th; horned cattle, from September 20th to October 5th; sheep, swine and goats, one group, from October 10th to 25th. All animals entered, except trotting stock and fat cattle, must be of pure blood and, besides, highly meritorious in condition, etc. Only