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To Inventors---"Honor to whom Honor is Due."

Many valuable discoveries and improvements have been made by which great benefits have been conferred upon society, the names of the authors of which are unknown, or the honors which they justly deserved have been conferred upon others. The successful commander in battle is generally awarded all the honors, although his success may have been due to some daring and skillful feat of a subordinate officer, like Kellerman's charge at Marengo. The hero worship is centred in the word *success*; but as Mr. Fairbairn said in claiming his share of the invention of the Britannia Tubular Bridge, "honor to whom honor is due, but not *all* to the first engineer." Many men have invented good improvements, but from the poverty and the obscurity of their position, have not been able to introduce them into public notice, or bring them into public use; this was especially true in the days when no public press was employed to spread abroad light and knowledge. At present (and perhaps it will be so in every age,) there are many useful improvements invented, the authors of which are not able to bring their inventions into use but the honor of their discoveries is safe, as has been, that of inventors for many years past. Uninformed literati often do great injustice to original inventors, by attributing their discoveries to mere copyists, who, under favorable circumstances, subsequently had brought their inventions into more prominent notice. As the advocate of inventors' rights, we have oftentimes to correct public reports respecting the authors of inventions, in order to do justice to every inventor according to the extent of his improvement—the real value of what he has invented. Thus, for example, it has been stated, that a new mode of ship-building has been invented in England, by which "*the* timbers are dispensed with, and the whole vessel built of plank." It is also stated that the Peninsular and Oriental Company has launched a new steamship at Cowes, which is made with "two thicknesses of diagonal planking, and a longitudinal planking outside, constituting the whole thickness of the sides." A notice of this system was published in the "New York Daily Times" of the 10th inst., the editor of which remarks upon it, "if the mode is practicable, it must be a great improvement." It cannot reasonably be expected, that any person can be posted up in the history of inventions unless he has long devoted himself to the study, and at the same time has had practical experience in his profession. This system of shipbuilding is not new. A steamboat on this plan was built by R. V. De Witt, Esq. of Albany, N. Y., and ran for some years on Senaca Lake, this State, and a United States schooner named the Experiment, on the same plan, was built in 1841 or '42. A book containing plates illustrative of the whole system was published by J. L. Sullivan, of Troy, N. Y., in 1823, and was termed "Annesley's System of Shipbuildinng."

The Inventors of Propellers.

On the 24th of last January, Mr. Raymond, editor of the "New York Times," delivered a lecture on the "Hot Air Engine," and in the course of his remarks he stated that Capt. Ericsson was the inventor of the propeller, and told a curious story about his first propeller boat, and a Commission of the British Admiralty. Mr. Raymond obtained his extraordinary information from a lecture delivered before the Boston Lyceum in Dec. 1843, by John O. Sargent. In the "N. Y. Times," of the 24th of Feb. last, the statement is repeated with the following endorsement:—"Now no English Government steamer of any kind is furnished with any other propulsive mechanism," (Ericsson's propeller). We assert that Ericsson is not the inventor of propellers for steamships, and that his propeller is not in use in England at all. The first inventor of the screw propeller in America, was Col. John Stevens, of Hoboken, the father of Robert L. Stevens, of this city. A person named Shorter took out a patent for propelling vessels by a screw, in 1800, which screw was adapted to the motion of the vessel by a universal joint. The renowned Trevethick proposed the Archimedian screw for boats in 1815, and in 1816 a Mr. Milligan secured a patent for a propeller, consisting of two vanes like those of a smoke jack placed beyond the rudder, and working with a universal joint. In 1825 Jacob Perkins, of Massachusetts, after he took up his residence in England, patented a plan for propelling vessels, which consisted of two vanes working in opposite directions and placed at the side of the rudder. Woodcroft, whose screw of an increasing pitch, as modified, is now in general use in the English navy, and on all the propellers in Britain, obtained his patent in 1832, and Smith for his modification of the Archimedian propeller obtained his patent in 1836. Captain Ericsson obtained the patent for his propeller in 1837; it differed from that of Perkin's in being submerged and placed behind the rudder. In conjunction with his propeller Capt. Ericsson patented the hollow hull, and a mode of disengaging his propeller, when required, which has been highly spoken of, but his propeller is of such questionable utility that the one with which the Princeton was fitted, was removed by Commodore Stockton, and replaced with another of a different character, by which that war steamer was enabled to sail much faster. This is stated in the excellent work of Chief Engineer Stuart, on our "Naval Steamers." Every one of the Atlantic propeller ships, the only really well tried and successful ships of the kind, with which we are acquainted, are fitted with section screw blades of an increasing pitch, and not the Ericsson propeller.

Various patents were taken out in the United States, prior to Capt. Ericsson's invention, such as J. Weddefield's, of Philadelphia, in 1815: H. Wheatley's, of New York, for segments of a spiral in 1818; J. J. Guinand's, of Baltimore, for screw, in 1831, and J. Smith's, of Charleston, S. C., in 1835, and J. B. Emerson's, in 1834; this latter inventor instituted suits against those who employed the Ericsson propeller as being an infringement of his patent, but we suppose his claims were too broad also. The great danger of lecturers, like biographers, is to make heroes of their subjects, and this (let charity say unwittingly) often at the expense of truth. It does no injustice to state what an inventor has done, and to praise its real worth, but when the claims of one inventor are taken from him and given to another, truth, honor, and honesty cry out against the evil. We could say a great deal more on this subject, but we forbear to do so at present.

The Blast in Locomotives.

In the same lecture referred to, delivered by Mr. Raymond, he asserted that Capt. Ericsson was the inventor of the *blast* in locomotives, and that at the opening of the Liverpool and Manchester railway, he employed it on his trial locomotive. This is not correct; the "Novelty," the locomotive of Braithwaite and Ericsson, employed a *blower*, and not the *blast*, on her trial. Let any person examine page 608, "Hebert's History of the Steam Engine, and he will see for himself that the "Novelty," had a *blower*, nothing more and nothing less. It was a beautiful locomotive, and much favor was shown to it but it failed entirely to compete with the Rocket, and there was nothing in it as a principal feature that is now employed on locomotives Timothy Hackworth is the inventor of the blast on locomotives; he employed it on the Sanspareil, which was the only locomotive that had it at the trial on the Liverpool and Manchester Railroad. The *blast* is also claimed for M. Pelletan, a French engineer, who no doubt invented it without any knowledge of Hackworth's application, but at a subsequent period. We have been thus particular on a subject which concerns the honor of inventors in general, because we deem it our duty, to allow of no injustice to any one of them, either through ignorance or malice, to pass unnoticed. We can furnish indubitable proofs to confirm the truth of all we have uttered. It is our opinion that the editor of the "New York Times" had no intention in making the statements referred to above, of doing injustice to those inventors over whom he placed the claims of Capt. Ericsson; what he stated, we believe, was uttered under the impression of its truthfulness. Correct and full information on such subjects is not so easily obtained but on that very account editors should be exceedingly careful of what they say upon such subjects, in order that they may always award "honor to whom honor is due."

Steam Boiler Telegraph Alarm Gauge.

A very ingenious gauge for steam boilers, the character of which is indicated by the above caption, has been in operation for some time at the Fulton Works of Messrs. Pease & Murphy, cor. of Cherry and Corlears street, this city. The alarm consists of an electro-magnet which can be placed in any place however distant from the steam boiler, and which will ring a bell whenever the water in the boiler falls below a certain line, also when the pressure of steam rises above a certain standard. The magnet which rings the bell is connected by wires to a battery and a column of mercury in a tube placed in the boiler is employed to break and close the galvanic circuit. When the circuit is broken the bell is silent, but when the pressure of the steam forces the mercury in the tube to close the circuit of the separated wires, the electro magnet at once operates a spring hammer that strikes upon a bell as long as the circuit remains closed. The alarm can be placed in the cabin of a steamboat, captain's room or any place desired. The one at the Works mentioned is placed in the office, at a considerable distance from the boiler. The invention is a very beautiful one, and while it has everything to recommend it, we are not aware of any objection that can be urged against it.—We have seen the apparatus in operation, and any explanation required was kindly rendered by Mr. Murphy. The apparatus, we believe, can be kept in order at but little cost, the renewal of the battery being all the running expense required, and this cannot be much.

Events of the Week.

Propelling Devices—"The Queen of the South," a large steamship belonging to the "General Screw Steam Company" (England), broke the fan of her screw on one of her recent voyages, and Mr. Field, of the firm of Maudsley & Field, of London—able engineers—who was consulted respecting the new screw, put in one with a decreasing width of fan or blade, and an increase of four feet pitch. The new screw was reduced 1600 lbs., and yet the ship ran with the same speed making ten revolutions less per minute. With the new screw she made 10½ miles per hour, with the old one only 9 knots.

Feathering Paddle Wheels—The steamship "Parana," (which was to have been the "Arabia," but was sold to the West India Mail Co., after the "Amazon" was burned), was fitted with "Morgan's Feathering Paddle Wheels," and it was supposed that she would surpass all the steamships in the world in point of speed; she made two very fast passages, but the "London Artizan" states that the feathering wheels have been taken out of her, and the old common kind put in, and that she goes much better. Two other steamships, the "Orinoco" and "Madalena," which were fitted with feathering wheels also, are about to be altered in the same way.

The New York and Erie Raiload—The "American Railroad Journal" handles the directors of this railroad with great severity, asserting that $6,722,260 have been spent for which no account has been rendered. It says that "as much money has been spent and not accounted for, as was first estimated for the original cost of the whole road." It insinuates something about a *secret service fund*. We do not know what can be the meaning of it, although from the statements published, it appears that the said company has managed its affairs in a most extraordinary manner. We hope the Directors will be able to make all things clear and explicit.

To Prevent Candles Guttering—A scientific correspondent informs us that by using the frustrum of a cone of wire gauze or perforated metal on the shoulder of a candle, it will keep the candle from flickering and the grease from guttering. This is certainly a good device for such a purpose.

Burning Fluid and Camphene—A Boston correspondent requests us to explain the difference—for the benefit of many—between camphene and the spirit gas (explosive fluid) sold in our stores, as many people suppose camphene to be explosive, and do not know the difference between it and the spirit gas. Camphene is highly rectified spirits of turpentine, contains no alcohol, and is not explosive. It will not burn in a common lamp without a chimney, as it contains C.10, H.8—a very large portion of carbon, and emits much smoke, which is only prevented by using a long chimney to supply a great quantity of oxygen to support combustion.

The spirit gas is a mixture of rectified camphene, with about five or six times its quantity, by measure, of alcohol. They are mixed together in a cold state. It is the volatile nature of the alcohol which is the cause of danger.

Square Cylinders—We have seen extracts in various papers telling how an engineer in Paris had constructed a steam engine with a "square cylinder," and consequently with a square piston. We confess to a knowledge of what a "square box" is, but a "square cylinder" is something really new—we do not know what it is. The idea of a square piston working in a rectangular box is really worthy of the enlightenment of the year one instead of the nineteenth century.

One great advantage of the reciprocating over the rotary engine, is the form of piston and cylinder. The round disc working in the round cylinder are the best known forms for working smoothly, uniformly, and for rendering the piston easily packed to work steam-tight.

English Patent Laws—A Bill is now before Parliament to amend several clauses of the late Patent Law Amendment Act: it provides for the payment of stamp duties for fees on letters patent. This will expedite the business of procuring a patent. Proper stamps are to be provided for the purpose by the Inland Revenue Commissioners. We will apprize our readers of the nature and provisions of the Bill when it passes, if it does pass.

A New Green Dye—The Chinese employ a substance of a vegetable origin, which contains no indigo and which dyes cotton fabrics, prepared with a mordaunt of alum, a beautiful green. M. Peroz, of Paris, has recently obtained some of this substance, and has made some successful experiments with it. We possesss no such dye in America, but Bancroft mentions that such a substance, has been long known in Africa.

Price of Machines.

We have received from time to time, a number of letters to urge upon inventors the necessity and importance of stating the price of their machines, when illustrated and described in our columns. In many cases this no doubt, could be done, but at the same time we believe, that when we give the residence of the inventor, and state that "*more* information can be obtained by letter," the best means are presented for those desirous of purchasing said machines, or of purchasing patent rights, to obtain minute information respecting the same. Thus, for example, a patent right for one city is more valuable than for another, and also for one State more than another.

The Convicted Aldermen.

Our New York Civic Fathers, have been taught a lesson which we hope will serve as a memento to future Aldermen. Sturtevant has been sentenced to 15 days' imprisonment, and fined $250, the others are fined $250 and $102 costs and expenses. We congratulate our readers that such has been the case, namely, that the law has been triumphant, and that villany, although sitting in high places, is yet amenable to the decrees of justice. They have been found guilty of contempt of court, and punished accordingly. *Fiat justitia ruat cœlum.*

Many of the Baltimore Mechanics are still on the strike for higher wages. Some of the shops will not give the wages asked, and it is stated that numbers of the men are not able to stand out much longer.