

Scientific American

NEW YORK, FEBRUARY 15, 1851.

Grand Supper.—The New York Sun Printing Press.

We were fortunate in being at the splendid Complimentary Dinner given to Col. R. M. Hoe, by the enterprising proprietors of the New York Sun, on the evening of the 29th ult. We intended to have had our article on the subject in the Scientific American of last week, but by an oversight, and a great one, it was not; our great press of matter alone must plead our excuse.

The Dinner was given at the Astor House, Mr. M. S. Beach presiding in a most able manner, and Mr. Alfred Beach doing other honors with ease and grace. In every sense of the word, the dinner was a most splendid one; Mr. Beach made a neat introductory speech, and Col. R. M. Hoe replied. Mr. James, the distinguished novelist, made a few happy remarks, so did Major Noah; also Rev. Messrs. Beecher, Thompson, and Chapin. A number of very good remarks were made during the evening. C. M. Keller replied to a toast respecting Prof. Morse's invention, and stated that his own countrymen had disputed his claims. The allusion was rather out of place, and Mr. H. O'Reilly, who was near him, felt it deeply. When he arose he spoke feelingly upon the subject, and went over a history of his telegraphic operations. Some of his statements were incorrect, or his words conveyed different ideas from those he wished to convey. He was understood to say that no New York merchant could be found, in 1845, to subscribe to a line of telegraph, and the first was subscribed by Mr. Swain, of the Philadelphia Ledger. This was not so: the New York and Philadelphia line was constructed by New York merchants, and this was the first line constructed by private enterprise. Great credit is due to Mr. Swain for what he did for another line; but Dr. Doane, of New Jersey, Mr. Norton, of this city, and a few others, were the leading minds of the first line. This flash at the supper, however, between Mr. Keller and Mr. O'Reilly, passed off smoothly. Quite a number of eminent authors and editors were present, and the Messrs. Beach deserve high praise for bringing such minds so agreeably into contact.

American inventions were deservedly complimented, and although we were not called upon for a speech, not being very gifted that way, no one there responded so heartily to the tributes paid to Mr. Hoe's perseverance and genius than ourselves, and none, perhaps, were better acquainted with the general history of our national inventions. Improvements in the Printing Press claim our admiration and gratitude. It has been well observed by an eloquent writer, "if a planet was blotted out from our system, its place could be well supplied by a Printing Press." Col. Hoe, not content, it would seem, with comparing the printing press to a planet, comes along with his Great Rotary, and hoes out *Suns* at the rate of 20,000 an hour. No wonder all the guests at the Messrs. Beach's Dinner were more than planet struck. The newspaper press deserves great credit for encouragement to mechanical invention, in the way of improvements, and none so much, we believe, as the New York Sun—long may its spirited proprietors live to reap the deserved rewards of their spirit and enterprise. The new press of the "Sun" is the largest and fastest in the world—this is something to boast of, assuredly.

Our Ocean Steamships and their Boilers.

We can always tell who are ignoramuses of science and panderers to public feeling, by the positions they take respecting different questions. It is human nature to hurrah very loud at any partial success, then to shower abuse upon any failure. Whenever we see a man or men toadying to such feelings, it is very good evidence that "there is something rotten in Denmark." This is the case at present with our Atlantic steamers. Brawlers who once boasted the loudest, are now the noisiest in their denunciations. One says the Collins line of vessels are inferior, because

Mr. Collins would not adopt and pay for the "Montgomery Boiler;" another blames the paddles, another the engines, another the whole management, another the build of the vessels. Who among them all knows what he is talking about. The most unlearned in these things are always trying to show their erudition, and this they do most effectually—to their own satisfaction, but not to that of others. It is not possible for any person to be a judge, comparatively at least, unless he be acquainted with the build of the hulls, their form, the engines, boilers, and the whole management of both the Cunard and Collins' steamers. Now we believe that no one man, —neither an engineer nor other person, here or on the other side of the water, is perfectly informed of all these points. We want facts—facts, not speculations, and until these are furnished, it is best to suspend all definite judgment, excepting upon those points which are prominent and manifest to those who are acquainted with them. As it respects the form of the Collins' steamships, the English writers, who have no warm side to the builders of the Cunard line, stated that the Atlantic was far superior to the Asia. Many of our ship captains, to our knowledge, have expressed the same opinion; but even the judgment of these men is not always correct, for we once saw a number of certificates of sea captains, speaking in the highest terms of certain improvements in life-boats which turned out a most miserable failure. It was generally asserted, that as the Collins' steamships had tubular boilers, they had an advantage over the Cunard line with their flue boilers. This was held up to be a great improvement by some English engineers, and a number of our own, also. It was stated that these boilers effected, or would effect a great saving of fuel. Whether this is so or not, we cannot tell, for there is an absence of facts, but where there is plenty of boiler-room, we believe that no boiler is like the long cylinder one with return flues. It is the safest and best. For compactness the tubular boiler is best, but then it needs pure water, for it has so many joints that it is difficult to prevent leakage, owing to the expansion and contraction; incrustations are also sure to play the mischief towards the end of a tedious sea voyage. Tubular boilers are peculiarly liable to priming and great danger arises from this cause. A scale of about 1-16th of an inch is formed in the interior of the boilers of our ocean steamers, during one passage between New York and Liverpool, and the evil of this is far greater in tubular than it can be in any other boiler. It is very difficult to maintain the feed of tubular boilers at a uniform height, owing to the smaller quantity of water in them than in the common boilers; the only remedy is carefulness on the part of the engineers—when this is wanting then there is danger. There can be no doubt but the Collins' Mail Line are the fastest steamships we have, but our rivals can do better than they have yet shown us, and it is right we should all know it. A steamship, making an average of fifteen knots an hour, would go to Liverpool in eight days and a half; not one of the ocean steamers have ever done this, and yet the British Admiralty, in their conditions with the Holyhead Mail steamboats, running between England and Ireland, stipulate for an average passage of fifteen knots per hour. There can be no doubt, but almost everything depends on the engineers—other things being equal—and our engineers, especially in the use of fuel, may have yet much to learn.

It has been established beyond a doubt that it is very foolish to push through a steamship, on a long passage, by dint of coal. It is a fact, that, as the speed of a steamship is increased, the consumption of fuel is increased about four-fold. If a steamship adds one-fourth to her maximum speed, by steam pressure, she will have to consume just double the amount of coal. This is a very important consideration. It is thus very easy to run short of coal in stormy weather without gaining much advantage in general speed. The draught of the funnel—the velocity of heated gases, is another important consideration, about which we are much in the dark, but it

has much to do with the general economy of using fuel. As we have stated once before, it would be well for science if regular registers of the whole workings of ocean steamships were fairly kept and published every six months or so. Then there would be some grounds, sure and steadfast, for comparison. This would lead to the correction of evils, and no doubt to many valuable improvements.

A Wallet Full of Inventions.

GREENCASTLE, Pa., Feb., 1851.

GENTS.—I herewith send you nine inventions of my own, and would like to have you examine them and give your opinion upon them; I send you nothing for your trouble, expecting that if I get any of them patented, that you will make enough out of me to pay your trouble. I have a lot more inventions on hand, that are in my mind, but I think this batch will answer for this time. Very respectfully, yours, E. P.

- No. 1, Car Wheel Brake.
- No. 2, Railroad Signal.
- No. 3, Spark Arrester.
- No. 4, New Mode of Building Vessels.
- No. 5, New Paddle Wheel.
- No. 6, A Cut-off Valve.
- No. 7, Bedstead Fan.
- No. 8, Bedstead Fastening.
- No. 9, Drying Machine for Grain.

P. S.—Can you tell me the effect that would be produced by pumping part air into a steam boiler with the water.

[We publish the above for the purpose of giving a little of an advice. The last question we shall answer first. The effect produced would be the filling of the boiler with water and air.

We have got through with five of the inventions, and have not yet found any of them patentable. It will be some time before we get through with the others, and if we don't find any of them patentable, we suppose that our correspondent will conclude that we have been well paid for our trouble, for he has made no provision for our labor, excepting we find something patentable, and then, he states, we will make enough out of him to pay for all. How exceedingly generous and considerate! It would indeed be a new way to pay debts, by making the plowman and sower responsible for their wages on good and bad seasons. In short, if we cannot make our correspondent's articles patentable, then, sirs, you don't deserve any pay for your labor. We are quite willing and ready to do any reasonable service in that line, according to our practice—for this, no doubt, assists us in business. We make this confession candidly, but we do not wish the public, nor any one of our subscribers to understand, that we make a practice of over-charging for patent business either to pay for E. P.'s unpatentable examinations, or those of any other person. We charge for every specification a price based upon the labor and skill required to execute it, and no more. Our prices are reasonable—in fact quite low, because we have a great deal of business, and we are not guided by the old lawyer's rule, of making one day's work pay for the next day's idleness. The skill, talent, knowledge, patience, and experience requisite to execute patent papers, as they should be, is not possessed but by very few.

Every correspondent should be guided by reason in asking information; he should describe clearly, definitely, and as briefly as possible, his objects. The great majority of our subscribers have the real good sense and gentlemanly appreciation of what is right, in this respect, but oftentimes, we own, our feelings are not a little hurt by having such cases as the above, especially when our correspondent's description of his inventions concludes as follows: "If none of the foregoing inventions should prove worth anything, I may perhaps trouble you with a few more not of the same sort." We beseech our correspondent to spare us the infliction.

Norfolk Steamships.

A bill has been introduced in the Virginia Legislature for chartering a company to construct steamships and establish a line of steamers to run from Norfolk to some point in Europe.

Art Union Lotteries, &c.

There are many kinds of gambling, but the most wicked kind is that which has a tone of morality and respectability about it, that which has respectable men for its parasites, and mealy-mouthed moralists for its panderers. As a counterfeit coin is the more dangerous the nearer it resembles a genuine one, so is that kind of deception which wears the most honest-looking countenance, and this is the case with your "Art Union Lotteries," for pictures, statues, &c. The success of some "Art Unions" has so fully developed the truth of our premises, that we now have lotteries for furniture in Tripler Hall, accompanied with fine concerts, and for fear that any one should question the morality of such proceedings, why, some of the funds are given in the boundless generosity of the toadying lotterists' hearts to charitable Institutions. A raffle for poultry in a dram shop, a raffle for an old teapot, at an Irish dance, to assist poor Judy Larkins, is virtue itself compared with these respectable gambling lotteries. The greater the amount of intelligence and of respectability there is about any evil, the more heinous that evil is. High and low like to copy after that which is respectable. Vice often becomes fashionable, because practised by those who are termed "honorable and respectable." To throw odium on the character of a drunkard, the Spartans often made their helots drunk, as a warning to the young patrician race. As it was in days of old, so it is now; human nature is the same all the world over; men are naturally led to despise what is low in others beneath them, while the low themselves palliate their evil practices, by appealing to the same being practised by the respectable. Oh! out upon all such respectability. But this is an age of philanthropy. We may be told that Art Unions encourage a taste for the fine arts, and enable many people to possess fine pictures, who otherwise never could. We may also be told that furniture lotteries enable poor people to possess house furniture of a quality far superior to what they ever could otherwise. This is all very fine—robbing Peter to pay Paul. How benevolent the managers of those schemes are. It reminds us strongly of the days when respectable church members used to have their tavern signs decorated with the heads of Calvin, Edwards, Fletcher, John Wesley, and such worthies. All schemes of chance—this catering to that morbid passion of the human mind—a high strike for making a good bargain—is evil, and evil only. No one can limit its consequences. It begins with a respectable draw for a "would-be good picture," and ends with the secret gambling table.

We speak against these practices, combating with a principle, for we care not how fair these schemes are said to be conducted—they are founded in evil, and we cannot expect pure waters from a turbid fountain.

Attention, Patentees.

Messrs. Editors—As I am a subscriber of your valuable paper, and you are willing, as far as you can, to give information respecting patents on different improvements, I would ask about a purchase I made, of a patent right on an article of some value. The patentee, before the right expired, put in a disclaimer for part, and has taken out Letters Patent for that of which he is the inventor; by this, his patent is continued for the full term of fourteen years, when his original patent would have expired in three years. Purchases were made of him before he put in his disclaimer, now, have I a right in the patent last taken out by him for the fourteen years? Please answer in your next paper, and oblige A. F. Lewiston, Pa., Feb. 8, 1851

[Our correspondent, A. F., is in error; no disclaimer extends a patent a single day beyond its original term. If A. F. has not lost anything by the disclaimer, the patentee has not gained. Let A. F. see to this, his patent may now be of little worth.—[Ed.]

Some of the London Papers give out that the Crystal Palace will be lighted, during the fair, by the American electrical light. We won't see it: happy those will be who do, eh?