

Scientific American.

MUNN & CO., Editors and Proprietors.

PUBLISHED WEEKLY AT
NO. 37 PARK ROW, NEW YORK.

O. D. MUNN.

A. E. BEACH.

TERMS.

One copy, one year \$3 00
One copy, six months 1 50
CLUB RATES { Ten copies, one year, each \$2 50 25 00
 { Over ten copies, same rate, each 2 50

VOL. XXVIII, No. 7. [NEW SERIES.] Twenty-eighth Year.

NEW YORK, SATURDAY, FEBRUARY 15, 1873.

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BURNING WATER AS FUEL.

It is astonishing how prevalent the notion is that water can be advantageously burned as fuel. All that can be said and written on the subject appears to have no effect, and easily deluded capitalists are always ready to invest in the newest contrivance that comes along for the above purpose. There has recently been a tedious suit in reference to the invention of Moses Thompson for burning wet tan, during which a ponderous volume of testimony was taken and a tangle of scientific evidence elicited that might well stagger the judge on the bench and the practical tanner in his yard, provided any of them have that faith in a long life which must precede the perusal of such an amount of worthless matter. There is the usual array of high sounding names of witnesses who testify as experts, and he must be an exceedingly expert angler after truth who can make out what they are driving at. It is clear that Judge Blatchford did not allow himself to be deluded by these experts, for he knocks the whole crowd off their feet and fires a round shot through the enemy's camp by the following conclusive sentence: "It is apparent from the evidence that Thompson was the first to discover and put in practice the true method of economically burning wet fuels, and obtaining from them better results than from equal quantities of dry fuels," which goes to show that the Judge believed the following claim put forth by Thompson: "The water in the fuel, in the presence of carbonaceous substances in the furnace, will be decomposed, giving its oxygen to the carbonaceous matter, dispensing with the draft and its cooling and wasteful influence, and rendering combustion so perfect that no smoke is visible." We hardly know whether the inventor proposes to shut the water and carbonaceous matter up in a strong box to "dispense with the draft," and, by the decomposition of the water and the re-combustion of the hydrogen, create a perpetual motion for affording heat such as the world never before saw, or not. The science of the proposition is too deep for us, and we cannot blame the Judge for being captivated by it. People will always believe in the perpetual motion whether in mechanics or in combustion, and it is better to join them to their idols and leave them alone. As our readers, however, do not belong to this class, it may be well to let in a little outside "draft" on the laws of combustion by way of ventilating the subject.

The heat required to elevate a given quantity of water one degree is employed as the unit of measurement. The results obtained are called heat units; and as experiments have been tried upon all combustibles and gases and the products have been tabulated, there is no difficulty in obtaining all the information that any one may require on the subject. When it is designed to burn water as fuel, it must not be forgotten that it is necessary to convert the water into vapor by the absorption of heat, then to decompose it and burn the hydrogen at the expense of oxygen over again, thus reproducing vapor, which when it escapes, after having passed through all of these stages, must carry away heat as irrecoverable as that blown off through the safety valve of a boiler. There is, therefore, no possible theoretical gain of heat in attempting to pass water through these circuitous processes.

Air-dried wood contains at best a large quantity of the elements of water, and most people prefer to burn the dry article. If the advocates for consuming wet wood were honest in their belief, they ought to keep the wood pile in soak all the time to prevent the disadvantages likely to accrue from the loss of water. During the last fifty years, something like sixty patents have been taken out in the United States relating to water gas in one form or another. The list affords a curious collection of attempts to accomplish

impossible results, and it would be a real service to the country if they could be posted up as warnings to ambitious inventors. Sometimes the hydrogen of the water was carburetted by being passed over tar or oil; that is the favorite method with this class of gas inventors. The water must first be converted into steam, then decomposed by the glowing coals, and the resulting hydrogen brought in contact with turpentine or other hydrocarbons, when it is carburetted and ready to burn for both light and heat. Other inventors decompose the water by passing it through iron grates on which are placed the live coals; on closer examination it was discovered that they obtained their hydrogen at the expense of the iron of the grates, and this was pronounced to be decidedly too expensive for practical use. Another apparatus introduced steam through an iron tube; but finding the tube disappear, they substituted a fire clay mouthpiece and were disgusted to find the operation no longer successful. As long as there was any red hot iron to decompose the water, they got enough hydrogen; but when that was removed, the decomposition ceased. In general, the sixty patents were founded upon the principle of burning up some valuable substance, including the furnaces themselves, in order to obtain an apparent gain. They robbed Peter to pay Paul, and had to pay the penalty for such unscientific conduct. In 1850, the world was astonished by the famous water gas patent of Paine, who converted water into hydrogen or oxygen at will, without leaving a trace behind, and whose fame has not yet died out in connection with more recent efforts in the same direction.

This whole business of burning water as fuel is an imposition, fostered by ignorance and encouraged by dishonesty; and it is high time that it should be suppressed.

THE METROPOLITAN MUSEUM OF ART.

The Metropolitan Museum of Art in this city has rented a large and splendid building on Fourteenth street, and will immediately proceed to prepare it for the reception and exhibition of the many rare objects now in possession of the society. The present lease is for eight years, the premises being only intended as a temporary place of deposit and exhibition. The large and splendid permanent Museum is to be erected in Central Park, and will be finished by the time the present lease expires. This temporary opening of the Museum in the lower part of the city is an excellent idea, as it will be conveniently accessible to all classes of our citizens, who will learn to understand and appreciate its importance. Among other curiosities that are to be soon placed on exhibition is the remarkable collection of Chaldean, Assyrian Phœnician and Grecian antiquities, more than ten thousand in number, recently discovered and exhumed in the island of Cyprus by the United States Consul, General Di Cesnola. This is one of the most valuable collections in the world, embracing ancient sculptures, vases, coins and ornaments, of the most elaborate workmanship and rare beauty.

ARE THE PLANETS INHABITED?

The *Evening Mail* contains, under the above head, an argument tending to an affirmative answer to this question; but it is founded more on poetical imagination than on sober truth. The writer says: "Reasoning from analogy, it is hardly possible that such magnificent worlds as are within telescopic inspection, far surpassing our own in magnitude and celestial beauty, are solitary globes, destitute of living forms organized for enjoying as much as we," etc., and he ends with the statement that the spectroscope has demonstrated that the composition of these worlds as to their metallic resources is essentially like that of the earth; and he asks, finally, "why not in all other respects?"

The answer to this question is that in all other respects the conditions required for organic life are exceedingly complex. One of them is a temperature between 32° and 100° Fah., and this condition prevails only on two of the planets, the Earth and Mars; all the others are too hot, and their moons are too cold; at least, it is probable that the moons of Jupiter, Saturn, and Uranus are as thoroughly cooled off as our own moon, which is as totally unfit for the existence of organic life as the tops of our Himalayas. If the spectroscope had not demonstrated that the celestial bodies were compounded of the same elements as our earth, we might perhaps argue that, for other elements unknown to us, another range of temperature might be required for organic life, but the revelations which this admirable instrument has given exclude such a supposition; and as, in connection with the telescope and photometer, it has also taught us that a temperature of 1000° Fah. and upward prevails on all the planets except Mars, the idea that they are all inhabited at the same time, is fallacious.

We say at the same time; the moon may have been inhabited millions of years ago, when the surface of the earth was as red hot as that of Jupiter is now; and when by further cooling during thousands of centuries our earth will have become desolate, it may be the turn for Jupiter and other planets to become the scene of the most luxurious organic life.

A German saying is: "God works slowly, because He is eternal." No doubt the universe was not created in a hurry; planets have been revolving around central suns for millions of centuries, and according to unalterable laws have their periods of preparation, disturbance, evolution, organization, then their period of full organic development, and finally of decay; it is already, *a priori*, very unlikely that these different periods of their history should exactly coincide, as the planets differ individually and are placed in different conditions; the larger ones must cool slower than the smaller, and those further from the sun faster than those nearer to that

orb. Each has its own individuality, its own history, and will go through the different periods of its destiny in its own time, a time so long that our longest historical period is comparatively a mere instant; while it sweeps in its course through spaces so large that all the empires of our earth are comparatively a mere handfull.

THE NEW YORK STATE REWARD FOR IMPROVEMENTS IN CANAL NAVIGATION.

Our readers will remember that in 1871 the Legislature of the State of New York passed a law offering a reward of one hundred thousand dollars to the introducer of a plan, for navigating the Erie canal in this State, which should prove on actual trial, to be better and more economical than the existing method of towage by horses. The following were the chief requirements of the law:

A Board of Commissioners were appointed, consisting of George B. McClellan, Horatio Seymour, Erastus S. Prosser, David Dows, George Geddes, Van R. Richmond, Willis S. Nelson, George W. Chapman, William W. Wright, and John D. Fay, whose duty it was to practically test and examine all inventions that might be submitted to them, by which steam, caloric, electricity, or any motor other than animal power could be practically and profitably applied to the propulsion of boats upon the canals. Such tests and examinations were to be confined to the seasons of canal navigation in the years 1871 and 1872, and the Commissioners were required to demand that the competing inventions should be tried practically upon the canals at the expense of the applicants; that the boat should, in addition to its weight of machinery and fuel, be able to transport at least 200 tons of cargo, be able to run at a speed of not less than three miles per hour, be easily stopped and backed by its own machinery, which should be simple, economical, and durable, and readily adapted to the present canal boats. Lastly, the law requires before an award is made that "the Commissioners shall be fully satisfied that the invention or device will lessen the cost of canal transportation, and increase the capacity of the canal."

The limit of time for competition for the reward expired with the close of canal navigation last fall, and it may not be uninteresting to make a cursory review of the operations of the various competitors, give an outline of the construction of the boats, and see if we can determine who among them, if any one, is likely to carry off the hundred thousand dollar prize.

We do not intend to give the particular numerical order in which the boats were put upon the canals, but for convenience of reference will designate each exhibit at random. If from this list any exhibitors have been omitted, we shall be glad to be informed, so that correction may be made.

Exhibit 1. Steamer Dawson. Inventor, Thomas Main. This was a common canal boat altered for the purposes of the trial, which alteration consisted in making a concave recess in the bow of the boat, in which a common propelling screw was set. About 20 horses power were employed, 200 tons of freight were carried, and a speed in excess of three miles an hour, on an average, was obtained, except when detained by lockage. The average running time through the canal was 2.02 miles per hour.

Exhibit 2. Steamer Baxter. An ordinary canal boat fitted with two stern propellers of the ordinary construction, driven by one of William Baxter's patent compound engines. The only peculiarity claimed for this boat was that she was simple, and could be run on less coal than any other boat; and such indeed proved to be the fact. She made two or three successful trips through the canal, and proved to be a useful and economical boat.

Exhibit 3. Steamer Montana. An ordinary canal boat fitted with a single 9 foot feathering wheel encased in a box in her stern. A. H. Brown, inventor. Forty horse tubular boiler, 2 engines 9 x 18, direct action. Burns less than one ton coal in 24 hours. Speed 3½ miles an hour loaded, and 5½ miles light. Ran very well.

Exhibit 4. Steamer Hemje. Charles Hemje, inventor. This was a well modeled boat, provided with an ordinary stern screw propeller, and the chief peculiarity consisted of a cylinder in which the screw was enclosed. This cylinder was movable and served as a rudder, and was used to steer the vessel. By turning the cylinder, the column of water ejected from it by the screw was deflected, which assisted steering. This boat made good time, carried over 200 tons of cargo, and worked extremely well.

Exhibit 5. Steamer Eureka. Hiram Niles, inventor. This boat was propelled by means of two conical shaped screw propellers, arranged on the outside of the bow, upon the same angle as the bow. The points of the two screws converged, like the two lines of a triangle. This boat ran faster than any of the experimental vessels on the canal, and performed extremely well. But she proved rather heavy, and, in order to carry 200 tons of cargo, required 7 feet of water, which the canal did not, on an average, afford. Built by Niles, Buffalo.

Exhibit 6. Steamer Port Byron. Inventor, F. M. Mahan. Through the hull of this boat, from bow to stern, runs a trunk or water way, and in the after part of the boat a common paddle wheel is set within a chamber, which forms a part of the trunk. The motion of the wheel draws in water at the bow, and discharges it at the stern. This boat made successful trips, and operated very well.

Exhibit 7. Steamer Forest City. Built at Russel and Eads yard, Buffalo. An ordinary canal boat fitted with two vertical propellers, placed one on each side of the stern. These propellers are on Dr. Hunter's plan, the blades feathering, and so made as to be feathered from the deck so as to act on the water at any desired angle. This facilitates

steering, as the propellers may be made to act sidewise, or in line with the vessel's keel. This boat performed well, made good time, and carried 200 tons.

Exhibit 8. Steamer *Excelsior*. This boat, built of iron, was fitted with Mallory's patent propeller, which is constructed somewhat on the principle just described. By its use the vessel is steered as well as propelled. The blades of the propeller are made to feather from within the boat, and they act upon the water at any angle desired. Very good results were obtained, although we believe the owners did not compete in carrying cargo.

Exhibit 9. Steamer *Geo. M. Pheter*. This was an old canal boat altered for these experimental purposes. A little abaft the middle of the boat, an opening on each side is made and water ways or trunks inserted, which converge into one discharging trunk at the stern. In each trunk a 4½ feet screw is placed. Engine, 40 horse power. This boat made one trip and operated very well. Built by Russel & Eads.

Exhibit 10. Steam Pump boat. Propelled by a piston at the stern, operating in a cylinder. Results not satisfactory.

Exhibit 11. Steam Pole boat. Propelled by poles which were made to operate on the bottom of the canal and push the boat along. Results not satisfactory.

Exhibit 12. Steamer *Vermont*. Endless belt of paddles on each side of the vessel, passing over rollers at stem and stern of boat. Results not satisfactory.

Exhibit 13. Stern wheel steamer. A recess in the stern in which an ordinary paddle wheel was placed. Resembled the ordinary stern wheel steamers. Result not very satisfactory.

Exhibit 14. Tow path locomotive. This was a trial of Williamson's road steamer *Enterprise*, placed on the tow path of the canal. It was a twenty-four horse steam engine, mounted on three wheels, with a hinged smoke stack. Four boats, three loaded and one light, were attached by rope to the steamer, which made four and a quarter miles per hour with them, and ran from Albany to Port Schuyler. The experiment was considered to be a success, demonstrating that towage could be expeditiously and economically accomplished by this method. But it is alleged that the tow path of the Erie canal is unsuited for road steamers in many parts, and would need, in order to permit their successful use, an improvement and strengthening of the path, involving great expense. This trial was not within the limits of the competition, which applied only to devices for propulsion not moving upon the bank.

Exhibit 15. Steam rope towage. This method consists in having a wire rope laid on the bottom of the canal along its whole length. A steam tow boat is employed, on which there are a series of gripping rollers; the rope is brought on deck and passed between the rollers, which are driven by steam and pull the boat along, with other boats in tow. This is known as the Belgian system, and works very well on the few miles for which it has been adopted on the Erie canal. Full accounts have been heretofore given, in our paper, of its operation. This method was excluded from the present competition.

Exhibit 16. Steamer *Success*. Captain W. F. Goodwin, inventor. The distinctive feature of this exhibit consisted in having a train of boats, specially made to join and work together. No other exhibit on the canal presented this feature. The propelling power was contained in the front boat, the bow of which was provided with a hollow paddle wheel, extending entirely across the bow, and well enclosed. The exterior of the wheel was provided with a band of cogged teeth, with which meshed the teeth of a driving pinion, and motion was thus communicated to the wheel. Twenty horse power engines. This exhibit brought through the canal and down to New York a cargo of 13,200 bushels of corn, or 400 tons, in 10½ days running time. In respect to cheapness of running per ton of cargo carried, this exhibit of train boats was a decided success, and the inventor is confident that the principles of construction are in the main correct, and that, with such modifications as the experience gained on the canal has suggested, he will be able to solve the problem of canal steam navigation in the most satisfactory manner.

It may be said, in respect to nearly all of these exhibits, that they have demonstrated that canal boats may be successfully operated by steam power. But have any of them fully and satisfactorily fulfilled the intent and conditions of the law? We think not. Before any of the exhibitors can expect an award, the Commissioners "shall be fully satisfied that the invention or device will lessen the cost of canal transportation and increase the capacity of the canals." It is evident that none of the exhibitors are entitled to an award, for they have all come short of these requirements. The next inquiry is whether any of the exhibits are likely, on further trials and the addition of new improvements, to accomplish the design of the law? It seems to us that an affirmative answer may be conclusively deduced from the results of the experiments, and we will proceed briefly to point out the reasons.

It was demonstrated, by a majority of the boats tried, that they could steam through the canal, except for detentions, at about one third the cost of horse towage. But a single steamboat, if delayed, rapidly runs up expenses, as the cost of maintenance is almost the same, whether moving or standing still.

It was further demonstrated that one steamer could carry nearly 200 tons of cargo, and tow three additional boats carrying 240 tons each, making in all 920 tons of cargo, with but little additional expense over the cost of running a single steamer, and it became evident that the solution of the canal problem depends upon the successful running of boats in trains. But it was also demonstrated that, in the present

defective condition of the canals, the crowd of horse boats, the rocks, wrecks, sedimentary deposits, shallow places and other obstructions, the towage of boats by lines in the ordinary way was productive of great confusion and serious delays. If the towing boat slacks in speed, the boats in tow jam together; they collide with horse boats, and are in other respects comparatively unmanageable.

It is, then, to the introduction of better means of working and controlling boats in trains that we are to look, in order to lessen the cost of transportation or increase the capacity of our canals.

In respect to this matter, the suggestion which has been made, of placing side screws at the bows of the front boat so as to work the boat laterally when steerage way is lost, we consider to be of much importance. Resort is at present had to poling by hand, a slow and laborious operation. If some quick and ready method of applying steam power could be introduced as a substitute for poling, almost half the difficulty of canal navigation would be overcome.

Another appliance needed for train navigation is the placing of steam power in the rear boat. The principal towage power should be in the front boat; but there should be a reserve power at the stern, to assist in guiding the train and swaying the train promptly as circumstances require. Other minor improvements will suggest themselves to experimenters. But those we have specially mentioned, it seems to us, are absolutely required.

Another deduction, made evident from the results of these experiments, is that the limit of time fixed by the Legislature for the competition was altogether too short. The construction of experimental machinery of any kind is always more or less slow, and alterations have to be frequently made to adapt new inventions to practice. Many of the competitors in the present case were compelled to go through the canal with defective machinery, for lack of time to change or strengthen it.

Then again, by some remarkable fatuity, the canal officials, when applied to by competitors for information as to the depth of the canal, invariably replied that it was 7 feet in mean depth; width at surface, 70 feet, bottom, 56 feet. Many of the competitors built their boats to run in this water, but found, on entering the canal, that 6 feet of water was all they had to depend on, and this only in the center of the canal, the sides shoaling very rapidly, whereby the boats were frequently grounded and greatly injured.

The exhibitors have joined in a memorial to the Legislature, asking for an extension of the time for trials and the apportionment, for the purposes of new trials, of those parts of the canal that more nearly furnish the volumes and depths of water that were originally and impliedly assured to them by the law under which they engaged in the competition.

The subject is one of great importance to the State; and if the Legislature will now grant the petition of the memorialists, and encourage their enterprising efforts, we have no doubt that, ere another two years have elapsed, valuable methods for practically reducing the cost of transportation and increasing the capacity of the canals will have been produced.

ARMY AND NAVY PATENTS.

The question has lately arisen whether officers in the army and navy are entitled to the same privileges, as relating to patent rights on military inventions, as are accorded to private individuals, and whether the Government should compensate such inventors, by royalty or otherwise, for such use as it may make of their devices. The subject is one which has long been agitated in both arms of the service, in which it is the general opinion that the absorption, by the country, of private privileges, whether patents or inventions or shares of copyright of professional books, works an injustice, besides tending to check a spirit of investigation and a desire to perfect crude ideas which might, if fostered, prove of material benefit to the nation. The provisions of the bill recently introduced in the Senate to allow to the widow of Rear Admiral Dahlgren a suitable compensation for the use, in the navy, of her husband's patented guns and projectiles, bring the matter prominently before the public, and afford an opportunity for a decision which will furnish a precedent for the future.

To our mind, there is but one view to be taken of the subject. The officers of the army and navy enter the service at an extremely early age, and for the residue of their lives are the wards of the nation. Educated and supported at the expense of the people, their first duty is manifestly to their country. It is clearly a moral and, by the implied contract which they assume, a legal obligation upon them to devote their best efforts in return for the benefits they receive. Clearly, therefore, if they so employ the advantages freely afforded them in such a manner as to render the same productive of valuable results, such fruit of their efforts belongs not to themselves but to the country which, for this very specific end, has intrusted to their keeping the knowledge, of which their ideas are but the outgrowth.

To descend from general principles to a definite case, if the Government pays one of its servants to perform certain work, if such services comprise the experimenting upon, examination and improvement of munitions of war, for example, it is evident that, if no especial result be attained proportionate to the value expended in conducting such investigations, the loss will fall, not upon the individual but upon the nation. Why then, on the other hand, if he be successful in fulfilling the very labor which he is paid for performing, should the servant, who runs no risk, receive an extra compensation, while the Government, which incurs the entire responsibility, is obliged to expend even a greater sum than if his toil had been fruitless?

We do not deny the right of a military employee to obtain a patent on an original device, if such be his inclination. But we believe that the authority of the nation over matters which are clearly within the line of his duty, as is the case with the designing of improvements or inventions of a professional nature, is paramount; and, while the patent should hold good as against all the rest of the world, the Government should be entitled to its free use and enjoyment.

In the special instance of the claim of Mrs. Dahlgren, we agree with Senator Morrill in his opinion that its grant will establish a dangerous and impolitic precedent. As regards the intrinsic merits of the case, however, we consider that it would be but a graceful and just recognition of the worth and appreciation of the services of an able, faithful, and brave officer if Congress would appropriate an adequate sum for the maintenance of his family; not in satisfaction of any claim, but as the free and unrestricted gift of the people in whose service his life was passed.

THE EMPLOYMENT OF WOMEN.

The presence of Miss Emily Faithfull in this country at the present time has revived the discussion of the woman question, and been the occasion of public assemblages to consider a report upon the best form in which to disseminate correct information and influence popular opinion on the subject. A meeting was held a few evenings since at Steinway Hall which must have given great encouragement to the advocates of the new movement. It was not one of the unfeminine exhibitions with which we are too familiar in New York, the tendency of which has been to repel delicate and sensitive women from taking any part, but it was a dignified, refined assemblage of the very best representatives of the sex to be found in New York. The woman artist, the author, the teacher, the artisan, the editor, and every trade into which woman has been able to find her way, were represented by their chosen delegates. There was no loud talking, no expression of woman's rights, no complaints, no recrimination, but a straightforward presentation of facts and statistics that must have carried conviction to any but the most selfish and mercenary hearer. Mrs. Henry M. Field, formerly Director of the School of Design for Women, presided and introduced Miss Faithfull to the audience. Miss Faithfull's address was reported in full in the morning papers and need not be repeated here, but the ideas suggested in it, and the remedies for the evils complained of which were there advocated, are deserving of careful study and consideration on the part of mechanics, tradesmen, and thoughtful citizens everywhere. If we study the progress of invention we shall find that, in many directions, some new contrivance has invaded the special avocations of women and taken from them the ability to earn a subsistence by work which at one time was their monopoly. Not many years ago the baking, brewing, spinning and weaving were conducted by women at home in the domestic circle. It enabled the females to contribute to the support of the family, and oftentimes the sister sustained the brother at college without being compelled to leave the sacred precincts of the home circle. Some of the best men in our country owe their opportunities for education to the self-devotion of women at home. How does the case stand at the present time? The baking is conducted by men, even in small towns. Machinery for sifting, stirring, and kneading the flour has been invented, which must be superintended by men, and it is only in limited circles that bread baking can be conducted at home. It is true that men complain that women know too little about baking, but that has nothing to do with our argument, and we must let the women defend themselves from the aspersion. The fact is that baking on a large scale has been taken away from the women.

The same historical record must be made in reference to brewing. Home brewed ale was the favorite beverage in Old England and in New England, many years ago. The farmer's daughter could formerly contribute largely to the support of the family by her skill in compounding a domestic brew. Perhaps they seasoned the beverage too well, for the taste for it increased more largely than the supply, and it soon became necessary to establish immense breweries, to be again supervised by men, and this part of woman's avocation was gone. So we could go on drawing illustrations from the great mills for spinning and weaving, only that in these latter mills women are permitted to earn a support, and there has been some compensation to them for the wholesale theft of what was formerly the chief home avocation of our grandmothers. Enough has been said to show the encroachments upon woman's peculiar province by the invention of machinery and the introduction of modern improvements. These inventions and improvements have certainly tended to advance the prosperity of mankind, and it ought not to be made a reproach upon our civilization that they have been made at the expense of the women. It was claimed at the meeting that the sex was entitled to some recompense for the wholesale robbery.

There are plenty of avocations which men have monopolized which they ought to be willing to exchange for the stolen property they now hold in their hands. For example, there are 14,000 appointments under government, not including post offices, of which women get 600; there are 250,000 clerkships of all sorts, in shops, telegraph, insurance and other offices, for which women are peculiarly fitted, and yet they get no more than a beggarly 7,000. Now would it be asking too much of some of the lubberly, hulking fellows, whose sinews and muscles are evidently intended for deeds of prowess and strength, to give up jumping counters, doing up parcels in red tape, directing wrappers, and keeping petty accounts, and to turn their attention to some of the avocations for which women are unfitted and where their strength can have full play? There are many employments to which