

iron-clad vessels and batteries might well tax the energies of any nation unburdened by war and with all its departments of government in a prosperous condition. How much more difficult is it, then, to do so when its force is paralyzed, and its energies are benumbed by the rampant treason and insubordination which is detected on every side! If it were a paramount object, in founding such national establishments, to secure a better and more thorough class of workmen than could otherwise be obtained, we could most heartily co-operate with the Secretary and second his efforts in all possible ways. Such is not the case. No better workmen can be found in this country, or in any other, than those which through our private foundries; it is immaterial whether they be native or foreign. If they are exotic, they have been attracted hither by the superior wages they receive, as well by the increased social and political privileges they enjoy.

To establish national workshops is to offer a premium for all sorts of incapables, who may have political influence; and it is now, or has been until very recently, as difficult to obtain employment in Government yards as if there were no especial hurry or urgency. We have this statement from good mechanics who have sought for work and not found it, owing wholly to their being unacquainted with "some influential man in their district," or their entire ignorance of all kinds of political machinery. Not only can these facts be established, but it is also true that, at a period when the Government required the services of engineers of experience to fill acting appointments on the transport, dispatch, and iron-clad vessels and batteries which it was constructing, this same political shibboleth presented itself and became a grievous stumbling block in the way of men who really desired to serve their country. This error has been practiced to the injury of the acting navy appointments.

National workshops would not obviate the difficulty alluded to, by any means. How vast or how great would the Secretary have this or these establishments? Or how large a sum would he be willing to recommend Congress to appropriate for the purpose? How long would it take to build such a national workshop or shops, and how many subsidies would have to be provided for friends of the contractors? What length of time would elapse before the shops were stocked with tools, and what eminent firms would receive the whole contracts for supplying them? What antediluvian systems and what crab-like progression would be inaugurated in spite of the protests of the mechanical world outside of these fostering Government yards! It is not chimerical, in view of former experience in these matters, to assert that favoritism could be the rule, and that manifest injustice to a deserving class of men would be practiced.

It is hinted that the private establishments cannot turn out sufficient work to answer the demand, as also that they cannot make as large a class of forgings or castings as might be desirable. These are singular assertions in view of the facts. At this writing, all the foundries in the country are busy on the heaviest kind of work—shafts, cylinders, boilers, all of the first class in respect to dimensions, are going forward on every hand. What Government could do more? There are steam hammers and foundry floors that will, in respect to the former, fabricate armor plates or shafts that no ship in the navy could carry; and as to the latter, there are pits where such slight things as condensers weighing thirty-five and forty tons can be constructed. If there is any especial need for more massive products of better material than are now furnished, we are much in error.

But there is yet another point which would, we think, act materially against the successful operation of national workshops. And this is the contract system which the Government observes toward private establishments, and is properly insisted upon to guard against fraud and delay. How can there be any guarantee to the public, in a time like the present, that their interests are consulted as far as possible, equal to that now afforded by the spectacle of the private workshops in the various States in full blast night and day? Not only this, but heavy forfeits are insisted upon from the contractors, both as a spur to them and a remuneration to the people in case of

non-compliance with the provisions of their pledge. How can a Government exact forfeit from itself?

We repeat that, in our opinion, the country has no need of national shops at this or any subsequent period, further than those which are necessary to complete repairs upon ships already in service; and we doubt very much whether these could not be better accomplished in private shops. The work which has been done for Government by first-class companies of the kind just alluded to, has always, or in most cases, been up to the mark, but can as much be said for those engines which have been remodeled under Government supervision?

An example of the incompetency of the Government to carry on such great undertakings is well attested in the miserable war-vessels which it has hitherto built. It is a fact that the best war-vessels now in the service were built by contract with eminent ship-builders.

BRING ON THE PAPER STOCK!

So earnest and pressing has become the demand for paper, and so imperative are the public needs, that the attention and ingenuity of nearly every interested person in the community is turned toward this subject. The high price of cotton and the scarcity of rags are urged by dealers as legitimate excuses for enhancing the cost and diminishing the supply of the manufactured article. We are inclined to think, however, that one very strong reason can be adduced for the increased price, which has been carefully kept in the background; and that is, the mania for speculation with which the nation is bitten, and which has infected this branch of commerce in common with most others.

Nine cents per pound are now paid by dealers for old newspapers, pamphlets, and, in fact, waste paper of all description, and we urge all who have, at this time, any store of the above articles, to bring them forth and consign them to the warehouse. Authors who may have on their hands tons of unsaleable editions, the merits of which the public obstinately and mulishly refused to see, can now recover their expended time and treasure by retailing their brains, like beef or pork, at so much per pound. Let not these gentlemen imagine that their flowers of rhetoric will be lost, their sonorous periods fall dead and still-born, or that their passionate and eloquent appeals will be lost to fame. No! They will all be merged into one grand chaos, in common with thousands, yea, millions of others. Where is Train and his pamphlets? Now is the time for him to reap glory and profit—twin honors that seldom go hand in hand.

We heard, but the other day, of some persons who realized about seventy-five dollars as the proceeds of the sales of numberless books and waste papers of all kinds. In fact, for all we know to the contrary, there may have been some love-letters among them—some tender missives full of pathos and bathos—letters, yellow and dim with age, written over on all sides, crossed and re-crossed, signed with all sorts of romantic titles, breathing vows of affection unchangeable—epistles, in short, which were once priceless but are worth at this time—just nine cents per pound! It is well to be careful, however, in pulling out and selling this rubbish, as there is one instance on record, which occurred in Philadelphia, of a valuable ledger belonging to a merchant being found among a lot of old books sent to the paper dealer. Persons who live at a distance can collect all their stores of this kind, put them in a large washtub, wet them and mash them into a pulp or nearly so, then drain them entirely dry and send them to market. It is not necessary to put in anything beside paper—sand does not add to the value of the stock, nor, in fact, does any foreign matter, and dealers will rigidly reject all such as has the appearance of being adulterated. The old paper is put into the picker and torn to pieces the same as rags; the ink is then bleached out of it, and it is worked over in the usual manner. Probably no better opportunity will be offered in many years than is presented at the present time to dispose of lumber of this sort. It is a good time to clean the literary house.

White rags, at the present time, are worth twelve cents per pound and colored rags eight, and every scrap and thread that can be put in the market goes just so far toward answering the demand and consequently diminishing the price.

Bring out the rags and papers, then, and let us retain our reputation as a nation of readers!

ORDER IN THE ENGINE-ROOM.

There is much force in the old saying extant that "order is heaven's first law." We can testify to this virtue as being a most excellent one in conducting sublunary affairs. Most especially is it needful in places and situations that are full of complicated and costly machinery.

The duty of the engine-room consists of a certain fixed routine, in ordinary cases. In the morning the water is tried in the boilers, the fires are lit, the pressure evolved, and the engine or engines set in motion; supposing them to be in good order, they run without cessation, except such as may naturally arise in the operations of the workshop; it may be that a belt runs off, gets caught in the shafting, or similar occurrences. Now in all these details, from the first to the last, we must have order and regularity. If an engineer comes in of a dark wintery morning and has to light his fire, he must know exactly where to lay his hand on the match box. He must know where the lantern has been left, in what particular corner the shovel stands; in fact, possess that intricate knowledge of the situation which a blind man seems to have, intuitively, of his surroundings; only where the latter gropes, the engineer must use the means nature has furnished him, eyes and brains, and rely unhesitatingly upon them.

A well-ordered and well-kept engine-room is remarked at once by all persons, and the conductor of the machinery praised accordingly; but the sloven meets only with contempt. When we see the screw wrench kicking around under foot, the hammer half in the bedplate and half out, a flat chisel or two laying just where they will soon roll off into some part of the valve gear, half a dozen washers, some lamp wick, a little red lead, and ends of india-rubber in a heaped-up mess in one corner, intermingled doubtless with two or three old pipes—we have the key at once to the way in which business is carried on in that place. Such sights as these are by no means uncommon, and upon viewing them, we generally go to the cylinder, and it is oftener the case than otherwise, that we hear the rings *slating* back and forth with each alternate stroke, or else giving the peculiar excruciating grunt that a cylinder emits when requiring lubrication. We assert, unhesitatingly, that an engineer who is careless of externals will be reckless of the internal condition of his engine and machinery. Read the papers unquestionably, when you can do so without interfering with your business; but do not sit down to do so with this or any other article in your hand before you have put things to right first. Slovenliness makes waste, and waste makes want—if not to you in one shape, it certainly will in another; and we would impress upon the engineering fraternity in general to keep their room and tools neat and in good order. There are many advantages arising from it which will be felt not alone in comfort and convenience but in the moral value of the lesson. Many and many a serious accident has been averted by reason of the engineer's knowledge of the situation of his tools. Many shipwrecks and breakages generally have been prevented by having the axe or hammer at hand, the chisels in the rack, the screw wrench in the locker, just where they can be reached at a moment's notice; instead of their being down in the coal bunkers, left in the boiler when the man-hole plates were last taken off, or indeed thrown down in one corner so dark and unexplored that the tools never see the light of day again. Let us have order and regularity, and our predictions of disaster will rarely, if ever, be verified.

MUSK-RAT HOUSES.—It is generally believed by "old trappers," who ought to know more about it than any body else, that the formation, strength and height of the musk-rat houses is a sure precursor of high or low water during the spring succeeding their construction. Now, if there is any truth in this, then we may expect a raging high flood next spring, for it is a fact that the average height of the musk-rat houses is at least two feet higher than for several years past. We leave the subject for naturalists to investigate.—*St. Paul Union.*