

THE AMERICAN MECHANIC.

BY AUGUSTINE DUCANNE.

Lift up thine iron hand,
Thou of the stalwart arm and fearless eye;
Lift proudly now thine iron hand on high—
Firm and undaunted stand!

No need hast thou of gems,
To deck the temple of thy glorious thought—
Thou hast the jewels which thy mind hast
wrought,
Richer than diadems!

Thou art our God's high priest,
Standing before great Nature's mighty shrine;
For the whole world the glorious task is thine,
To spread the eternal feast

Even like the Hebrew chief
Strikest thou the rock, and from its deep,
Mysterious heart, the living waters leap,
To give the earth relief.

Mighty among thy kind,
Standeest thou, man of iron toil, midway
Between the earth and heaven, all things to
sway
By the high-working mind!

Thou canst delve in the earth,
And from its mighty caves bring forth pure
gold;
Thou canst unwrap the clouds in heaven rol-
led,
And give the lightning birth.

Thou hast the stormy sea
Chained to thy chariot wheels, and the wild
winds
Obey the overruling intellect that binds
Their rushing winds to thee.

Thou canst bid Thought go forth,
Upon the electric pinions of the air,
And through the opposeless ether thou canst
bear
Thy words from South to North.

Thou canst new lands create,
Where the wild-rolling wave mastery owns,
And the vast distance of opposing zones
Canst thou annihilate!

Lift then thy hand to heaven!
Spread thy toil sceptre o'er the sea and land:
Thou hast the world intrusted to thy hand—
Earth to thy charge is given!

Copper and Silver Mines, Mexico.

The London *Mining Journal* of 12th ult. contains full statements of the operations in the various mines, at Riapas, Guanajuato, the Balamos, and Copiapo Mines and those at Laraga, Pachuca, Real Delmontes, &c. The *Alexander Harvey* and the *Michael Williams* had arrived at Swansea, in South Wales with 710 tons copper ore, and 4 tons silver ore, to be there smelted. Copper ore, value \$240,000, was sent to Swansea, Wales, to be smelted, last year, from Australia. In Chili, they smelt the copper ore themselves, and thus export it to Europe.—At the new smelting works in Chili, copper as pure as any in England will be produced—and if in South America, why not also on Lake Superior? England derives some \$200,000 a year of revenue from duties levied on foreign copper ores brought to her ports to be smelted. Messrs. Gemmel & Co. in a letter to Mr. McGregor Secretary to the Board of Trade, advise the removal of these duties, as if continued the smelting trade will centre in Chili, or be transferred to "manufacturing rivals in the United States, France or Belgium." On May 27th, about 7,100 tons of copper ores were sold at Truro and Swansea, at from \$6 to \$115. One ton of Canadian brought only \$261, which would not pay expenses.

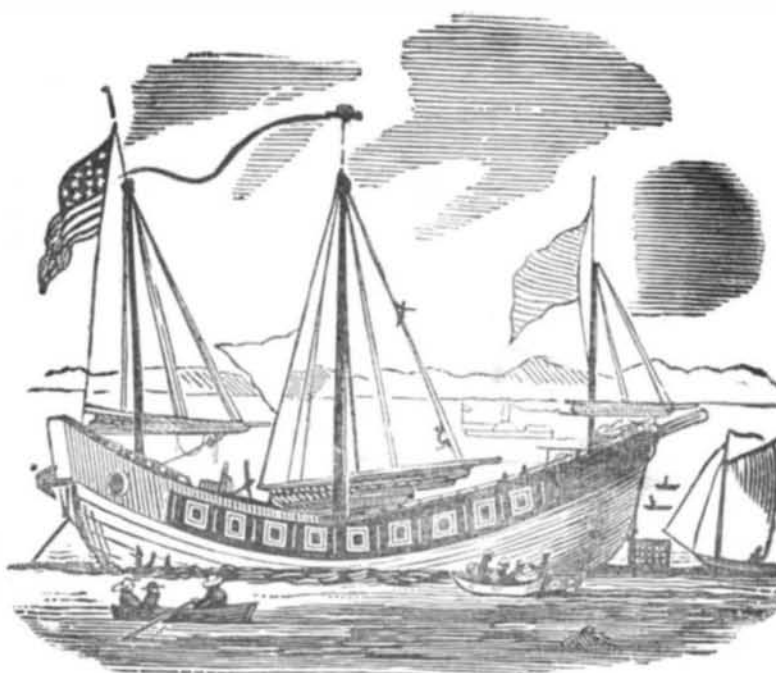
Consumption.

It is stated that in England, there are always 130,000 persons dying slowly from consumption. The fact has been proved by the registration returns. There were 34 deaths by it in this city last week.

Western Boats.

It is stated in the St. Louis Herald that the boats go about two mile in five hours through the Louisville Canal. These must be antipodes to the telegraph; but the fault is in the road, not in the traveller.

THE CHINESE JUNK.



The above is an engraving of the famous Chinese ship "Keying." We cannot tell whether she ever stood a brush with the English or not, but she is bored for carrying 30 guns. She is painted in a fantastic manner, like the spotted Tartars, who throw somersets when they make a charge. She is 150 feet long, 25 feet beam and 12 feet hold, and built mostly of teak wood. Her cabin is large and airy, and full of curiosities. She is rigged with latteen sails that are worked from the deck, and was 212 days on her voyage. There are 40 Chinese as part of her crew, the rest Europeans. The Chinese are a weakly-looking race in comparison with their brawny Anglo Saxon comrades. There are no females aboard from their celestial land, and we missed a sight of the little feet, but we have seen them before, and think that the Junk as she is, will satisfy the curiosity of any of us Yorkers for once, and when she comes back again Killet, the master, will be sure (having got his hands in), to bring over some slippers with feet in them.

The Chinese vessels, or junks, as they are

called, have been aptly compared to their shoes; and their form is so clumsy, and the absence of a keel is so important a defect, that there is no possibility of any great improvements in their construction, until the prejudice of the builders shall be so far overcome as to change their plan in these two fundamental points. In order to place the rudder, they think it necessary to split the stern, which exposes the vessel to danger. Their substitutes for tar and oakum are bad; a mixture of oil and gypsum, and bamboo shavings. Their common sails are mere mats, which are not very easily managed, but yet are flat, and enable the vessels to lie nearer the wind than ours. The absence of keel, however, allows a monstrous lee way. Their anchors, strange to hear, are made of wood, though a heavy kind, called by them *teih-mo*, (iron wood.) They often carry loose cotton topsails in light wind. The seamen worship the Queen of Heaven as their protectress and also their compass, which has red cloth upon it, and a kind of sacrifices are made before it.

A Steam Horse.

A correspondent of an exchange paper, gives the following quaint description of the locomotive:

"I love to see one of these huge creatures with sinews of brass and muscles of iron, strut forth from his smoky stables, and saluting the long train of cars with a dozen sonorous puffs from his nostrils, fall gently back into his harness. There he stands; championing and foaming upon the iron track, his great heart a furnace of glowing coals, his lymphatic-blood boiling in his veins; the strength of a thousand horses is nerving in his sinews; he pants to be gone. He would "snake" St. Peter's across the desert of Sahara, if he could be fairly hitched to it; but there is a little sober tobacco-chewing man in the saddle, who holds him with one finger, and can take away his breath in a moment, should he grow restive and vicious, I am always deeply interested in this man, for begrimed as he may be with coal dilluted in oil and steam, I regard him as the genius of the whole machinery, as the physical mind of that huge steam-horse."

Idle Daughters.

It is a most painful spectacle in families where the mother is the drudge, to see the daughters elegantly dressed reclining at their ease, with their drawing, their music, their fancy work, and their reading, beguiling themselves of the lapse of hours, days, and weeks, and never dreaming of their responsibilities; but as a necessary consequence of neglect of duty, growing weary of their useful lives, laying hold of every newly invented stimulant to arouse their drooping energies, and blaming their fate, when they dare not blame their God, for having placed them where they are. Such scenes are becoming too common in our Republic.

To Construct a cheap Galvanic Pile.

To exhibit experiments in Galvanism, on a small scale, a pile may be formed at a very trifling cost, as follows:—

Procure about twenty cent pieces, (if worn smooth so much the better) or get some sheet copper cut circular, and of a large diameter, and the same number of similar pieces of zinc. The latter may be formed by the experimenter himself, being very easily melted, it may be cast in a mould like lead, or it may be procured in a sheet, and cut, similar to the copper. Then provide the same number of pieces of cloth, which must be soaked in a solution of common salt water; or, what is better, a liquid composed of one part of sulphuric acid, two of nitric acid, and sixty of water. After this is done, place one of the pieces of zinc in a tea-saucer, and on it put one of the pennies, or pieces of sheet copper; on this place a piece of cloth, and so continue making the pile—zinc, copper, cloth—until they are all piled on one another; taking care to observe the same arrangement throughout. The piece on the top, which will be a cent, should have a copper wire, which for some experiments, should be tipped with platinum wire, soldered to it, and the lower piece, which will be zinc, should be treated in the same manner. From the ends of these wires a stream of the Galvanic fluid will constantly issue, until all the acid is absorbed from the pieces of cloth; and although the apparatus is on a very small scale, a variety of exceedingly interesting experiments may be performed with it.

A cheap cement for cementing voltaic plates in wooden troughs is made with 6 lbs. of rosin, 1 lb. of red ochre, half a pound of plaster of Paris and half a pound of linseed oil. The ochre and the plaster of Paris should be calcined beforehand and added to the other ingredients in a melted state. The stronger the junction is, the thinner the stratum of cement that is interposed. There is another cement made of 16 parts of whitening sifted and thoroughly dried by a red heat, adding when cold a melted mixture of 16 parts of black rosin and one of beeswax, stirring it well when it is cooling.

The Abuse of Ether.

A correspondent of the London Times, gives the following example of the abuse of ether—the letheon or apatheon fluid:

"Entering a chemist's shop the other day, I observed a nurse come in for four ounces of ether. As the chemist poured it out, he said to me, 'This is all the go now—it is used for inhalation.' A small apparatus has been invented for ladies. So delightful are the sensation it produces, that persons who have used it for the relief of pain continue to use it for the pleasure it affords. On a former occasion I had warned a chemist of the danger of yielding to a habit which would become his master. The warning was neglected—the habit has gained the mastery—and the man of talent and of energy has become the imbecile, drivelling idiot."

The Calculating Negro.

Is a fat, idiotic looking man of about twenty-one years of age, and would probably weigh about two hundred. He has considerable physical power, but knows so little how to apply it, that he has never done a day's work in his life, he cannot without awkwardness and difficulty cut his own meat at meals. He is, an idiot, showing scarcely a spark of intellect, except in his strange, untaught, incomprehensible power of arithmetical computation, and here nature seems to have tried a mode of compensation by raising him as far above the ordinary mind in this respect, as in every other respect he falls below it.

He has told the product of any two numbers under 100, as 66 times 97; the solid contents of his room from supposed data; extracted the square and cube root of any numbers where they could be found without decimals; all far more rapidly than the most expert 'cypherer' could do by his slate.

The limit to his owners of calculation seems to lie only in his inability to comprehend the language in which many questions must be proposed. We believe he is a native of Kentucky.

Foreign Officials.

A correspondent of the National Intelligencer says, that a curious comparison has lately been made between the Government power and influence in France and that in Great Britain. This comparison represents the number of civil officials in France as being 932,000; those in England, including coast guard, 23,578. The French Minister of Finance has twelve times as many officers under him as there are in the whole of the Government officers in England. So far as political representation goes, France has about 200,000 electors, or about one to every 176 of her population has a voice in the legislative proceedings of the country; the number of electors in England and Wales is 900,000, or one in every 27.