

ing the bug to his lair and destroying his egg, exterminating mosquitoes and measuring earthquakes; making new probes to pull things out of folks' ears with; modeling creatures in clay and carving them in stone; designing World's Fair buildings for Chicago, and other buildings for Madison and and uncounted other squares, and cathedrals for New York; measuring the women's diaphragms to show why their noses are red.

Disinfecting sewage and disengaging aluminum; intercepting the floating germ and setting him to slay the innocent rabbit; finding drugs whose tremendous potency mocks even the purple fluid in the apothecary's shop window; ridden by nightmares and fashioning women's garments after the vision; speeding house elevators and testing timber trees; determining the course, S.E. and by S.,  $\frac{1}{2}$ S., which Sirius was sailing nine years ago when the light we get to-day set out from him; trying new crosses of blood for racehorses and fantail pigeons; painting impressionish pictures and composing music of the future and telegraphic cipher codes while mad-houses and suicides' graves multiply on every hand; applying liquid fuel and improving screw propulsion; identifying Sing-a-Song-o'-Sixpence with the funeral chant over the body of Patroclus.

Finding out how cold the moon is, why water feeds the flames of burning oil, and observing the effect of electric light on trees, keeping them awake; photographing a wink and tracing the history of rain gauges; devising apparatus to test the adulteration of wine, and adulterants to beat the apparatus; devising better material for underclothing, new models of yachts, binnacles and oil-serving swabs to still storm waves, and improved methods of brewing beer; devising dynamite guns, mill workers' homes, and glue that doesn't unstick; determining the apex of the sun's way near Lyra and *not* Hercules; trisecting an angle and recording the chemical life history of Jerusalem artichokes.

Sounding the sea, hatching fish and finding out what kills the oysters; making butter out of petroleum and honey out of shingles, with by-products which smell like a cow's breath and blow up with forty thousand horse-power; identifying the rheumatism microbe and subcutaneously injecting heart juice for heart failure; poisoning marine worms, propelling bicycles by electricity and making sub-marine torpedoes out of paper; making folks wash themselves; proving by mathematic demonstration that the vortex atom is the one thing in the universe that really does exist, when along comes Edison, saying the atom knows good and evil, just like folks.

Raising ghosts and ghostesses, inventing chess problems for gain, and getting real money for treatises on grammar, on the immortality of the soul, on the moral purposes of Shakespeare's plays and of Walt Whitman's style, and diagnoses of Byron's club foot and Richard III.'s abnormal spine.

These are some few, and very few, of the ways by which that stirring half of the world, which is neither very poor nor thoughtful lives. Is it to be doubted that the fragment which titters to confess it doesn't know how the poor half does live, commonly knows even less about how this ingenious half is living and what it is living for?—*N. Y. Sun.*

#### PRINTERS' PROFITS.

Mr. Theodore L. De Vinne, in an address to the National Editorial Association, made the following remarks:

\* \* \* The cost of presses is a serious expense, but if they can be kept fairly employed there need be no loss. As a rule, presswork is the profitable branch of the business. It is in

the composing room that is the great sinkhole. It is in types and wages of compositors that the profits of the house are lost.

\* \* \* When an office is small and can afford to buy but one or two presses, they should be of the best. A printing machine which can print a newspaper only and which cannot print a book form; that will print a poster and will not register for colors; that will print an ordinary pamphlet and that has not strength enough nor inking rollers enough to print wood-cuts—that machine is an expensive press, even if it does cost \$1,000 or \$2,000 less than a perfect machine. I know from experience that it takes a long time to earn \$1,000 on one machine, but I know also that one can lose the chance of earning that \$1,000 in delays and bad work in attempts to get on with a poor machine. A machine that can do any kind of work from a poster to a wood-cut is always a cheap machine.

Good machines call for good men. It is a mistake to allow a machine which costs thousands of dollars to be managed by an incompetent pressman. The incompetent man always does from three to ten tokens less a day, always uses more rollers, always wastes more paper and ink. The superior performance of the qualified workman justifies his higher wages. The damage that the machine receives from men who do not know how to handle it is great. Men who cannot keep their presses clean and who are viciously meddling with impression screws, bearers, and rollers, are dear at any price. Upon the pressman, more than any other workman, depends the credit of your office. Clean presswork hides a multitude of sins of composition. A good pressman can protract the life of your type one-half longer than the poor one.

#### MERCHANT NAVIES OF THE WORLD.

The estimate of the Bureau Veritas with regard to the merchant navies of the world for the present year puts the total number of vessels at 43,514, of which 33,876 are sailing vessels of 10,540,051 tons, and 9,638 steamers of 12,825,709 tons gross and 8,286,747 tons net. The figures as regards the steamers stand as follows:—

Nationality.	Number of Ships.	Gross Tonnage.	Net Tonnage.
English.....	5,312	8,043,872	5,106,581
German.....	683	930,754	658,182
French.....	471	805,983	484,990
American.....	419	533,333	375,950
Spanish.....	350	423,627	273,819
Italian.....	200	294,705	185,796
Norwegian.....	371	245,052	176,419
Dutch.....	164	220,014	149,355
Russian.....	230	177,753	115,742
Swedish.....	408	172,013	126,612
Danish.....	197	154,497	103,578
Austrian.....	111	149,447	96,503
Japanese.....	147	123,279	76,412
Belgian.....	55	98,056	71,658
Brazilian.....	129	75,970	48,901
Greek.....	68	70,435	44,424
Portuguese.....	41	49,364	29,564

#### AN INTERESTING EXPERIMENT.

A simple and interesting experiment enables one to trace sound vibrations in a glass of water. Take a fine, thin glass, such as will give forth a musical sound if rubbed with wet fingers, around the rim. Fill it nearly full of water, and, having wiped the edges dry and smooth, place upon the rim a cross made of two equal strips of thin cardboard (an old postal card