

glass plate to be treated is laid upon a damp cloth spread upon a table, and of the aforesaid fluid a sufficient quantity is put upon the plate, and the watch glass is used for rubbing, its convexity offering a firm hold to the fingers. In about $\frac{1}{2}$ hour a very nice satin-like polish is obtained; by rinsing with water you will satisfy yourself that the grinding has been uniform.

—The *Deutsche Uhrm. Ztg.* contains a short recipe for small watchmakers, who only at odd times are called upon to do gilding, watch-parts or other small articles, and by which the use of a battery is entirely dispensed with. It says, when wheels or other parts of a watch are disfigured by hard usage or botch repairing, and the watch otherwise is in fair order, but would look better by being regilt, clean the parts thoroughly, grind and scratch brush them; next procure from a drug store or photograph material store, one part chloride of gold, and four parts cyanide of potash, dissolve the two together in boiling water, and the gold bath is ready; into this suspend the articles to be gilt by a thin copper wire, which is hung on a clean scraped strip of zinc, and leave it immersed for a few minutes, when the articles will be handsomely gilt in a simple manner.

ANNEALING STEEL PARTS.—A communication to the *Deutsche. Industriel.* contains the following paragraph signed O. K. L. I experimented with steel, and wished to obtain on it a light blue. Pure lead melts at 315°C ., and the same degree of temperature is necessary to anneal steel to light blue. I melted the lead, raising the heat a few degrees beyond fusion, and having ground the steel white, immersed it in the lead, and after having immersed the steel in it for a few moments, withdraw it and had a handsome light blue color. To keep the lead from oxidizing, fuse it under cover of powdered charcoal and soda or potash.

A similar method can be applied for annealing steel yellow, (at 230°C .) by substituting zinc for lead. It must be remarked, however, that the flame must be extinguished as soon as the metal has fused, a continued exposure to the heat would raise the temperature.

SCIENCE NOTES.

DRAMATIC scene painters in Europe have about as fair an idea of things in general in this country as the average European journalist. One of the scenes in a highly popular spectacular play performed in Paris is the Brooklyn bridge. The bridge looks over three feet wide and 600 feet high. Several scores of ships in full sail are moving briskly under it. Palm trees grow on either shore and Indians sit on picturesque rocks around the Brooklyn entrance. At the New York end of the bridge is the capitol at Washington.

A STEAM buggy is under construction in Augusta, Ga. The machine will be about the size of an ordinary buggy, with two wheels behind and but one in front. The machinery will be located in front, also water and gasoline tanks. The boilers are heated by two gasoline burners. The front wheel is extra large, and will bear the entire weight of the machinery. The rear of the machine will be the same as an

ordinary buggy, with ample room for several persons. Its average speed is estimated a mile in three minutes. The speed of the first horse that gets his eye on it has not yet been computed.

AMONG the companies recently formed in Paris is a society for the utilization of solar heat, with a capital of 1,600,000 francs. The invention consists of a huge reflector not unlike an inverted umbrella, the interior of which is lined with a high reflecting agent. In the centre of this, and occupying the position of the umbrella stick, is a standard boiler made of a material highly conductive of heat. This receives the rays from the whole reflector and thus collects sufficient heat to generate steam. In addition to motors the society supplies domestic sun machines which boil water, prepare tea and coffee, grill chops and steaks, fry eggs, and cook other food. Portable machines are made for carrying on horseback which will boil water and serve a dinner on short notice. The company also supplies scientific machines and even furnishes the same power in the shape of a children's toy.

SAVED BY JOSH BILLINGS.—Josh Billings tells the following story of one of his own experiences:—"A few days ago I was driving in New York, and had got just alongside the Metropolitan hotel when a man with a satchel and duster hailed me. He said he wanted to talk to me a moment, and so I drove around on a side street, and we stood and talked.

"Now," said the man, "six years ago I was going down to my lawyer's office, in the town where I lived, to sign some papers transferring a matter of \$10,000. Suddenly something of yours that I had seen in a paper came into my head. I stopped short, thought a minute, went on to the office, and had the papers burned up, and did something entirely different from what I had intended. I saved by that \$6,000. Now I don't know anything about how you are fixed, but if money is any object to you, if there is anything you want, I am ready to divide with you. What will you take?"

"I took a drink. We stepped into the Metropolitan bar, and, after a little claret and ice, I asked the man what saying of mine it was that he had saved his money on. He said it was something like this:—"Never take the bull by the horns, but take him by the tail, because then you can let go when you want to."

"Yes," said the stranger. "I concluded it was just as well to take him by the tail. I could hold on just as well, I could steer him just as well, and let go when I please."

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