

THE UNITED STATES PATENT OFFICE.

The patent office building occupies two blocks of land, situated between Seventh and Ninth and F and G streets, and is 453 feet long and 331 feet wide, and is 75 feet high. In it are the offices of the Secretary of the Interior, the Commissioner of Indian Affairs, the Commissioner of the General Land Office and the Commissioner of Patents. The original building was of freestone and granite in the Doric style. Two wings of marble were afterward added, each of which equaled the main edifice.

At the time of the fire in September, 1877, the building contained nearly 75,000 models, arranged and classified for the convenience of parties interested.

THE WORLD IN WAX.—Mr. Grube, a maker of wax images in New York city, has constructed what is claimed to be the largest globe of the world, showing the ranges of mountains and other peculiarities of the surface of the earth, in relief, now in existence. Its diameter is four feet and about one inch, the scale being one in 10,000,000. The range of even the Himalayas would not be visible upon this globe if the scale were adopted for the elevations as for the map,

A NEW ROAD LOCOMOTIVE.—A new road locomotive has lately been patented by Richards & Dale, 36 Taylor street, Springfield, Mass., in which the traction will be secured by vertical bars acting as feet, dispensing entirely with driving wheels. The motive power will be applied directly to the main shaft by a crank-rod and crank, as in ordinary engines. No new principles being thus involved in the use of the steam, the machine is very simple and more likely to be practicable. The frame of the engine is horizontal with a two-wheeled truck at the rear end, while the main shaft is in front, in a horizontal transverse position. This shaft bears four cranks in addition to those that drive it. Upon each of them is a leg consisting of a straight bar, provided at the lower end with a suitable foot or shoe by which the traction is obtained. There is also an arrangement for shortening the length of the step in ascending grades or drawing unusual loads. The machine will work equally well backward or forward, and if a foot should happen to cut a channel in the ground without drawing the carriage forward it can be turned in either direction to get a fresh start. The engine may be detached

CHAFF.

If a man have a great many debts, are they very much to his credit?

A boy of 12, dining at his uncle's, made such a good dinner that his auntie observed, "Johnny, you appear to eat well." "Yea," replied the urchin, "I've been practicing eating all my life."

A NOTICE in a Western newspaper ends as follows: "The captain swam ashore. So did the chambermaid; she was insured for \$15,000, and loaded with iron."

PHOTOGRAPHER—"You look sober; smile a little." He smiles, and the photographer says, "Not so much, sir; my instrument is too small to encompass the opening."

In Stanstead, Canada, a man sold 10-cent packages "warranted sure death to potato bugs; no risk of poisoning animals as with Paris green." The packages were not to be opened until time to use them. One victim having three, opened one and found two square blocks of wood, on one of which was written: "Place the bug on this block and press firmly with the other."

PLEASANT ALTERNATIVE.—Stranger: "Here! You! We can't pass your ox!" Rustie:



UNITED STATES PATENT OFFICE BUILDING, WASHINGTON, D. C.

and accordingly the relief is made upon a scale which exaggerates heights twenty times. The oceans, seas and rivers are colored blue; the continents are yellow; the glaciers, icebergs and floating cakes of ice white. Plains and mountain ranges are clearly shown, and every part of the world is exhibited in its true character. Red, black and white lines cross the globe to indicate the isothermal belts, the variations of the magnetic needle, the date line where ships correct their logs by skipping from Saturday to Monday, and *vice versa*, and other facts of like character. The map has been corrected in the light of the latest discoveries down to two months ago. The northern coast of Siberia has been much altered in the atlases by the Nordenkjold expedition, the ships sailing in deep water over places marked as 500 miles inland, and being compelled to go hundreds of miles around promontories, etc., which are occupied on the maps by bodies of water. The globe is made of wood. The relief is formed by wax. Mr. Grube has been two years in perfecting his globe, and Chief Justice Daly and other geographers have lately been giving attention to it.

The new steel bridge over the Missouri river, at Glasgow, Mo., is the finest bridge of the kind in the world. It is nearly 500 feet long, and every strand is warranted to bend double before it will break.

from the feet so that it can be used for hoisting as well as locomotion. In the absence of illustrations we are unable to say whether the machine could be made serviceable in our mining regions or not.

CHINESE PORCELAIN.—The Chinese subject the greater part of their porcelain to but one firing, first drying the pieces sufficiently in the air to prepare them for glazing. This plan they are able to pursue, because the nature of the material is such that it resists the entrance of water. Their glaze is much superior to any in use in the European potteries, but it requires the most intense degree of heat for its fusion, and considerable art is consequently required for the management of the fire, as well as in the construction of their ovens. These are built in the most substantial manner, so that when the fire is at its greatest height the hand may be applied to the outside without any fear of burning.

BLACKING STOVES.—If those who black their own stoves will grease them before blacking, they will find it prevents them from rusting. Add a pinch of brown sugar to the blacking just before applying. This causes it to stick and it polishes much easier and with half the rubbing.

"Can't ye? Let 'un pass yew, then." "Stranger: No impudence, sir. The pass isn't wide enough for both." Rustie: "Bain't it? Well, I leaves it to he. Maybe he'll toss ye for it!"—*Funny Folks.*

TEYNSON'S early poem, "The Lover's Tale," just published, contains about 1,100 lines. A pretty long tale to pour into her ear, and she must have gone to see her at least three nights a week for a year. When he left, at 2 A. M. Monday, she would tie a string around her finger, and whisper in her ear, as he kissed her good-night, "To be continued on Tuesday evening."

PRESERVING INSECTS.—A. Laboulliere recommends plunging the insects, in the fresh state, into alcohol which has been saturated by digestion with arsenious acid (1½ pint will take up about 14 Troy grains of arsenic). The living insect put into this preparation absorbs about 0.003 of its own weight. When soaked in this liquid and dried the specimens are safe from the ravages of moths, *anthrenus* or *dermestes*. This treatment does not affect the color of blue, green or red beetles, if dried after soaking for 12 to 24 hours. *Hemiptera* and *orthoptera* can be treated in the same way; also the nests, cocoons and chrysalides of insects.