SEPTEMBER 21, 1901.

working upon a complicated pattern, the foreman of the loom—a boy about fourteen years of age—walks up and down, calling out, in a curious monotone, the number of stitches and the colors of the threads to be used. The Persian rugs and carpets are made by hand throughout, and none but vegetable or natural dyes are employed. It is to this fact that the longevity and durability of the Persian rugs are attributable, especially in connection with the colorings.

HOUSE BOAT "LOUDOUN."

The illustrations of the house boat "Loudoun," designed by Lewis Nixon for his own use, show what can be accomplished in the way of providing a floating home by one who knows just what is needed.

The "Loudoun" is 130 feet over all, 17 feet beam, and draws 6 feet. She is of steel up to 4 feet above the water, and wood above this. There is an unbroken upper deck 110 feet long enclosed by a netting rail and covered over by double awnings, the lower one blue, to do away with the glare of the water on bright days. The steel hull is divided into six water-tight compartments.

The living quarters are forward, arranged something like an apartment on shore. There are four large sleeping rooms, two bath and toilet with hot and cold salt and fresh water, a commodious dressing room, a parlor, and a dining room.

Back of the dining room the pantry extends across the vessel, and is the dividing line from the crew's quarters. The engine is forward of the boiler, so as to keep the heat away from the owner's quarters. There are no air-ports in the staterooms, as windows are used throughout. The owner's stateroom has six windows and four doors opening into it.

The vessel is driven by a triple-expansion torpedoboat engine, having cylinders 10, 15 and 25 inches by 15-inch stroke, steam being furnished by a Roberts boiler. The after end has the deadwood cut away, the shaft being supported by a strut, such excellent maneuvering power being thus obtained that the vessel will turn in her own length.

The crew have an after deck covered with a blue-

lined awning, which is 12 by 17 feet. The galley and pantry are bright and well ventilated. and the floors of both are covered with white tiles.

There is a large dynamo supplying electricity for a number of specially-designed lights, a storage battery supplying light after the owner retires, thus avoiding noise or vibration.

The anchors are raised by a steam windlass.

The "Loudoun" has proved herself an excellent seaboat and makes frequent trips to Newport and points along the Sound. She was designed to take advantage of the water facilities of New York—the Staten Island kills, upper and lower bays, the Horseshoe, Gravesend Bay, the Hudson and the Sound.

Ten men are carried in the crew—a master, chief engineer, two firemen, a chef, messboy, two stewards and two deckhands.

The "Loudoun" was named

Scientific American.

after the county in Virginia in which Mr. Nixon was born.

While nominally of 10 knots speed, the "Loudoun" often distances boats claiming a much higher rate of speed.

She can carry 14 tons of coal, and uses, in ordinary



A NEW BOOK LAMP.

cruising, about a ton and a half a day. The tanks contain 15 gallons of water.

An exposition dealing with the prevention of seasickness is being held at Ostend, Belgium, and a large variety of appliances, remedies, etc., are exhibited.

AN ADJUSTABLE ELECTRIC BOOK LAMP.

Our illustration shows a miniature portable electric lamp supported on a series of light, fiexible metal links, held in whatever position they are placed by the friction of the connecting pins at the joints, and having at one end a spring clamp sufficiently large to slide over a book cover or some other thin article for a support. From the lamp attached to the opposite end run two wires to a small dry or storage battery, which may be carried in one's outside pocket or placed upon an adjoining table, or in the lap of the person reading. In the case of a newspaper, the clamp may be adjusted to the forefinger of one hand and the light of the lamp projected upon such portion of the paper it is desired to read, both hands holding the paper. The small reflector throws the light onto the book or paper and screens it from the eye. The wires are connected to the battery by the usual thumb-screws, or by simply slightly screwing or unscrewing the small lamp bulb; this latter plan is much quicker and easier.

The convenience of this lamp is self-evident, particularly so in warm weather, when reading in the house is uncomfortable; lawns and piazzas may be then resorted to without fear of the light being blown out by the wind. It is also useful for amateur photographers in supplying a ready light for changing plates or developing, and for travelers, in cars, boats or hotels. Nurses find it convenient for use in darkened rooms. It can also be used with advantage in many other ways.

Where the electric current can be had, special sockets or connections are provided, so that the lamp can be used without the battery. Duplicate batteries are supplied, which can be connected as soon as one gives out, or storage batteries can be exsily recharged. We are informed that this novel lamp device has recently been introduced by the Portable Electric House Lamp Company, at 10 Cortlandt Street, New York.

Communication with Thibet.

An interesting endeavor is being made by a syndicate to establish trade communication with Thibet.

Under existing circumstances, commercial relations with this seclusive country are almost impossible, owing to the lack of transportation facilities of any description. As a solution of the difficulty, private enterprise is suggesting the construction of a rope aerial tramway from the summit of the Jalep Pass to the railway in the plains, and already a section of the country has been surveyed. The line will probably be carried on to Yatung, a distance of six miles by trail, but which is only three miles as the crow flies. The ropeway, when completed, will be forty miles in length, and will constitute a record in this means of transit. The engineering obstacles that have to be surmounted are numerous, but the syndicate are confident of success. If completed, it will completely metamorphose trade in Thibet. The main idea is to find a market in that country for the Indian tea. Owing to the close





1. Deck View. 2. Under Way. 3. Dining Room. 4. Parlor.