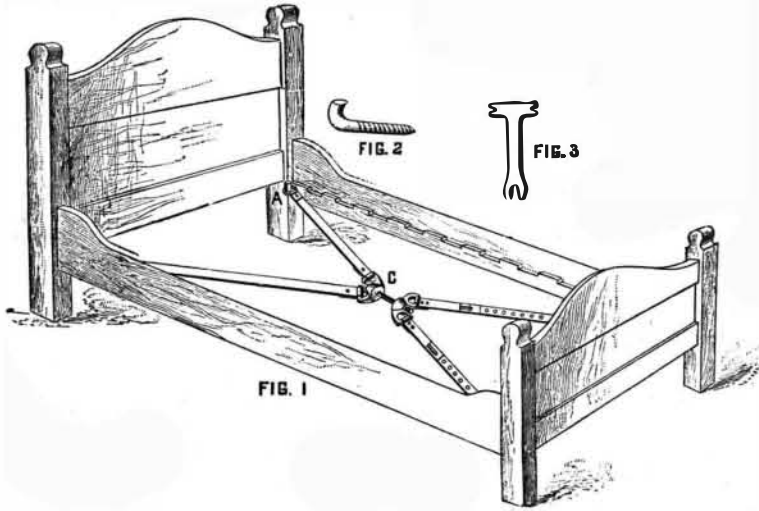


AN IMPROVED BRACE FOR BEDSTEDS.

A brace for strengthening bedsteads and holding the posts securely in place, and one readily applicable to old as well as new bedsteads, is illustrated herewith, and has been patented by Mr. Charles P. Lewis, of Sweet Springs, W. Va. The head and foot posts are each provided with a hook, A, on the inside, below the notched railing in which the slats are held, and to these hooks are attached the outer ends of bands fastened at their inner ends on the head, C, in which a threaded bolt is held to turn loosely, the bands being thus stretched and drawn very tight by means of a wrench. The bands are made adjustable, so as to fit



LEWIS' BED BRACE AND TIGHTENER.

the brace to bedsteads of different lengths, the two bands at one end having locking ferrules adapted to be locked by a pin fitting apertures in the bands. By this means the bedstead, besides being tightened in other ways, is made particularly rigid and strong laterally, and well braced against strains of moving.

THE NEW SPANISH STEAMER ALPHONSO XII.

The Alphonso XII. is a new ship, of which we give an engraving from *La Ilustracion Espanola*, lately built at Newcastle for the Transatlantic Company, of Spain. Her principal dimensions are: Length, 426 ft.; width, 48 ft.; depth, 33 ft.; draught, 24 ft.; displacement, 8,400 tons; indicated horse power, 5,000. She is one of the finest mercantile ships afloat—in fact, a veritable palace. As to interior decoration and furnishings, everything possible has been done for the comfort and entertainment of passengers. In the ornamentation there is a lavish use of marbles, bronzes, and costly woods. Taste and richness have been well combined. The most beautiful representations of the pictorial art, by notable living artists, adorn the inte-

riors. Libraries of books, magazines, and newspapers attract the reader. Spacious, well ventilated cabins are provided. Baths, electric lights, abundance of life preserving apparatus, and every appliance for convenience and safety are supplied.

Our particular object in this article is to call attention to the rapid and successful manner in which Spain is building up and extending her foreign commerce, with the hope that our own countrymen may be encouraged to do something in the same direction. If there is one thing more than another that our people at present desire to see realized, it is the re-establishment, on a broad and permanent basis, of our foreign commerce. This can only be done through the medium of home-built steamships of such superior construction and speed that the flag of the Great Republic may be worthily displayed in all the principal ports of the world. Nothing is more easy of accomplishment, and yet our legislators, upon whom the matter depends, have done nothing but talk upon the subject for the past twenty years. If we want a share in foreign commerce, we must do as other nations are doing, as England, Germany, France, are doing, namely, grant liberal subsidies for the purpose. This has been the fixed policy of Great Britain ever since the commencement of ocean steam navigation, and, as a result, her steamers visit every quarter of the globe, and she enjoys the trade of the world. Within a few days past, subsidies to the extent of sixty-five thousand dol-

lars a year for several years have been agreed upon for a line of steamers from Vancouver, the terminus of the Canadian Pacific Railway, to China and Japan, for twelve trips a year.

Within the past three years the Spanish government, by offering the stimulus of subsidies, has established several new lines of splendid steamers. Spain now has a noble lot of vessels plying between New York, Cuba, Mexico, and West Indian ports. On the Pacific she has a new line of steamships that regularly traverse the coasts of South and Central America. Her fleets of passenger ships sailing from her home ports to Cuba, to Manila, to Brazil, to the Argentine Confederation, and other parts, comprise some of the finest of vessels, and her commerce is rapidly growing in importance.

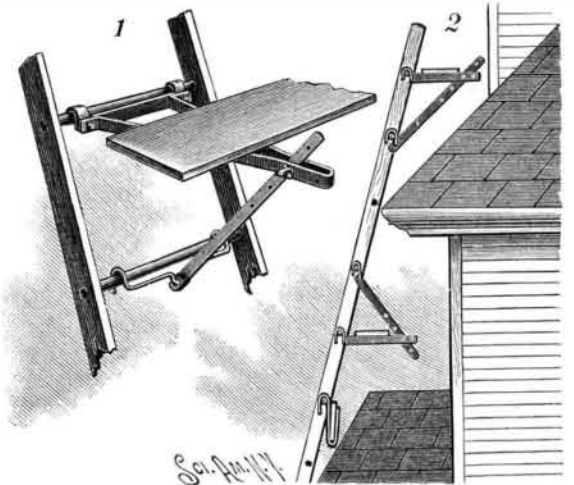
Electric Prostration.

Several cases of this new malady are reported from Creusot, France. It affects workers under electric light. The light exceeds 100,000 candle power, and it appears that it is this excess of light, and not the heat,

which produces the nervous symptoms. A painful sensation in the throat, face, and temples is first noticed, then the skin becomes coppery red, and irritation is felt about the eyes, much lachrymation ensues, and these symptoms then disappear, while the skin peels off in five days. The effects are comparable to those produced by walking over fresh snow in the sunlight, and may be regarded as a sort of "sun-burning."—*Lancet.*

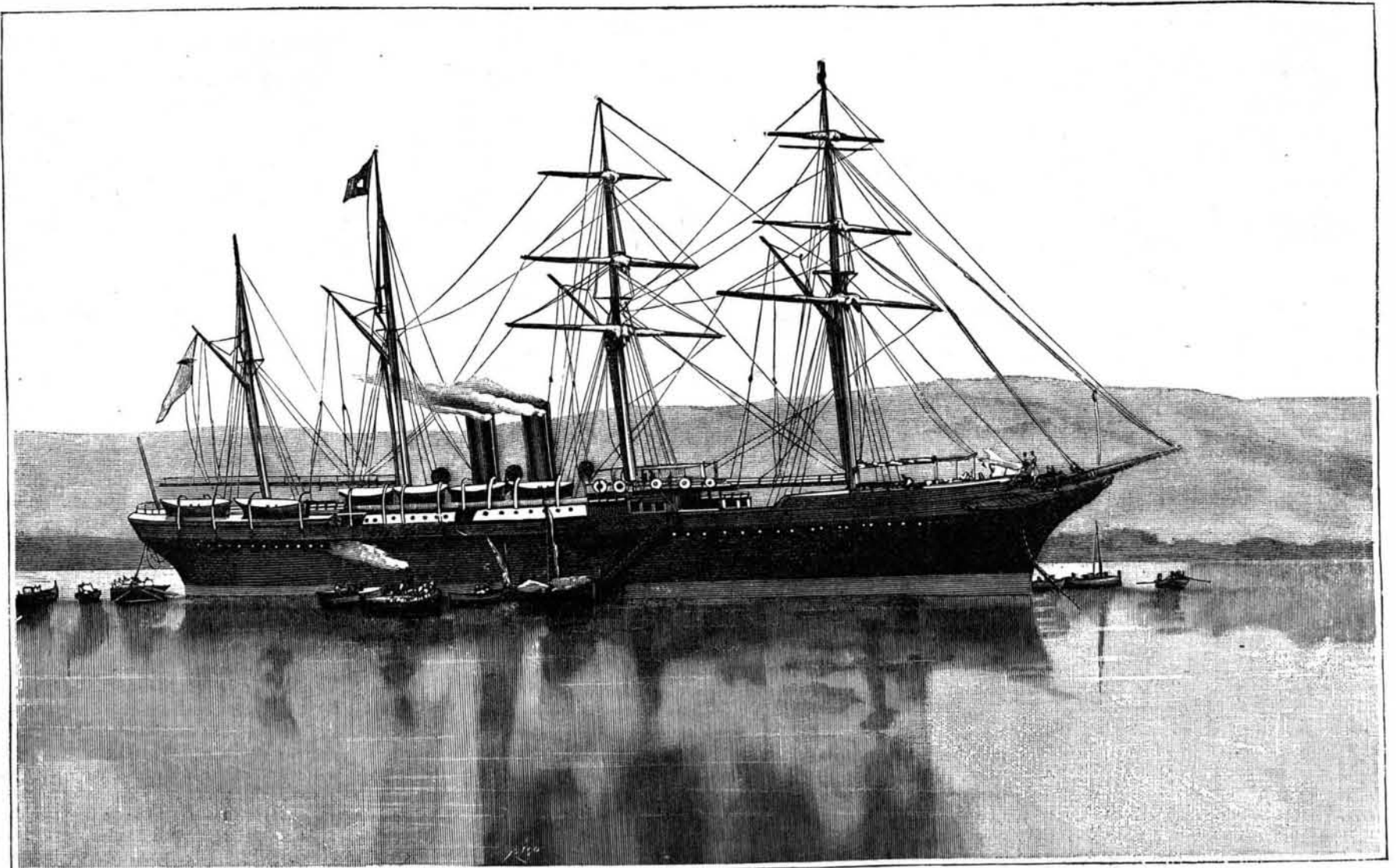
AN IMPROVED SCAFFOLD BRACKET.

A bracket which can be easily and quickly adjusted at any desired angle to a ladder, for supporting scaffolding, and one which is cheap and durable, is shown



LONG'S SCAFFOLD BRACKET

herewith, and has been patented by Mr. James A. Long, of Spokane Falls, Washington Ter. The horizontal brace for supporting the boards of the scaffold is made of flat iron, in an approximately V shape, as shown in Fig. 1, the free ends of the arms of the brace having offsets to which are secured iron hooks that partly encircle the rounds of the ladder. The outer portion of the horizontal brace has a space, outside the scaffold boards, for a running brace rod, both portions having perforations by which the brace rod may be locked by a bolt to the horizontal brace, the other end of the brace rod being adapted to engagement with a round of the ladder by means of a hooked clip. This bracket can be located at any part of the ladder, as may be required for working on different parts of a house, as shown in Fig. 2, the running brace being attached to the round above or below that engaged by the horizontal brace, as may be most convenient for the workmen. Double-hooked holders are provided to support the boards from the ladder while the brackets are being readjusted in changing the position of the scaffold.



THE NEW SPANISH PASSENGER STEAMER ALPHONSO XII.