тне
grintifir Ammont

## MUNN \& COMPANY, editors \& Proprietors

published weekly at
no. 37 park row (phrk building), new york.
o. d. munn, s. h. wales, a. e. beach.

Mossrs Sampson Low, Son \& Co. Booksellers 47 Ludgate Hill
London, Englana, are the Agents to receive European subscriptions London, Fnglana, are the Agents to receenve European subgate Hill
Lor advertisements 1or the ScisNTIFIC AMERIOAN. Orders senton for advertisements ior the SCIBNT
Ner "Tork.
VOL. XIII. NO. 8...[NEW SERIES.].... Twentieth Year.
NEW YORK, SATURDAY, AUGUST 19, 1865.


## TRANSATLANTIC STEAM COMMUNICATION.

Great activity is manifested in Europe over the establishment of new steamship lines to compete for the carrying trade between the two continents. In addition to the vessels already running, there are new ones building which are intended to be first-class in all that relates to speed and capacity.
The Hampshire (England) Independent of a recent date says that a company, long-projected, is about to go into active operation with new ships, between New York and Liverpool. The alliance is called "The Imperial Transatlantic Steam Company," and the steamers are to be 4,000 tuns burden. In addition to this line others, already in working order, are extending their operations, adding to their fleets, and remodeling them, so that every thing necessary to success will be insured so far as human foresight can go.

The French line recently established, running the Washington and Lajayette to this port, is, or was, worked by an English company, and called at a French port only incidentally on the outward and return trips. These ships are to be taken off and their places filled by others (worked by a French company) better fitted for the service. It is no v intended to put on not less than five first-class screw shipsthe Europe, Napoleon III., St. Laurent, Pereire, and Ville de Paris They are to run fortnightly, and will receive a liberal subsidy from the French Government. Thus it will be seen that, although the communication between the New World and the Old is already well provided for, in the view of disinterested persons, othei ships and other lines are starting up, wi h large capital, determined to succeed in their enterprises.

While this activity is taking place abroad very little is being done here. There are no new steamers on the stoeks, no engines for them in the machine shops. If any are projected they have been kept very secret, for we have not heard of them.

On Saturday, the 19th inst., the steamer Circas-sian-a British-built vessel, captured while running the blockade-is to be dispatched by Messrs. Leary, of this city, to Bremen and Southampton, as a pioneer ship, in a new effort to give our steam vessels and sbipping interests their proper place on the seas. With this, and a rumor that the Fulton and Arago, ot the old line to Havie, are to be re-established, there are no signs of vitality among our shipping merchants on what is a most important subject. So far as ships are concerned, we have them, or can have them, on proper nctice, either of iron or wood, as is deemed most suitable; eithor screw or paddle propeller, as is thought best. The engines can soon be fitted up, for

Government contracts are ended, and the machine North Eighth and Ninth streets, on which they have skops are almost id.e. All that is wanted is the word from the owners, and the keels would be laid and the bed-plates cast.
The always-to-be quoted "Collins Line" was the only natio ial one we ever had worthy of the name, and its ships were efficient ones. We can build better and faster ones at this period, but their engines ought not to be ponderous and complicated side-levers, that are forever getting out of line, forever having hot brasses, and in chronic difficulties with broken shafts.
The Re d'Italia, built by William H. Webb, Esq., for a war vessel, can make ten or twelve miles easily, as a regular duty, in decent weather. She went from this port to Naples, Italy, a distance of 4,920 miles, in 400 hours-or an average speed of 12 miles an hour all the way over. She is a full model, heavily rigged vessel, with great carrying capacity, and is, moreover, an iron-clad screw ship. With such improvements in her model as her talented designer well knows how to make, a vessel of this class would be a magnificent ocean trader that would challenge the best efforts of foreign ship-builders.
What is wanted, we presune, is a reasonable assurance that a new line "will pay." Men, however patriotic, will not subscribe for stock on natioual principles, unless they are certain of gettiing the full value of their investment." This can only be met by the suggestion that it Englishmen can build ships in Englard, and run them at a profit, Americans ought to build ships in America and make a good thing out of it. Giving Britannia to understand that she does not always rule the waves, is very nice, and easily done at a yacht race, but to keep up a line of steamships at a loss, solely to show the world what smart mechanics we are and what enterprising capitalists we have, is something that won't be done in a hurry.
We sincerely hope the day is not far distant when, as of old, our steamers shall be upon the ocean again. With the experience gained in past ycars, our shipbuilders can design models which shall leave foreign builders far behind, and it only requires some energy among capitalists and ship owners to begin at once.

## HOUSES FOR MECHANICS.

It is one of the social evils of large cities that dwellings for persons of small means are not to be had. There are none who feel this more keenly than mechanics. Atter toiling hard all day in the noise and clatter of the factory, they need a clean and quiet home to refresh them for the labor of the day coming. But, in New York, and in most large cities, this is a thing unattainable. Every mechanic who desires to live comfortably pays rent far beyond his means; or, if he chose the other alterative-a low rent-he must put up with quarters unfit to stable a horse in. We speak advisedly. No man can afford to pay more than one-sixth of his income for rent, and the laboring man cannot spare that even. Consider $\$ 2$ a day the average wages earned by mechanics, and we shall find that for $\$ 100$ per annum there are no accommodations fit to be called such. The only places offfred are crowded rooms, high up above the street, and reeking with vermin and stench.
The attention of capitalists, and philanthropists generally, has been frequently called to this subject, and many projects have been startes to ameliorate the evils complained of. Not one ever succeeded. The reasons are plain. In one case, a plausible scheme was planned, which was to erect a large building in the suburbs, where, under one roof, all things necessary were to be had at a moderate price; such as gas, baths, washing apparatus, sun-light, ventilation, and good order. This was encouraging, but, inasmuch as the projectors required workmen to come forward and subscribe for about $\$ 1,000$ worth of stock each, it is needless to say it fell stillborn.
By a recent issue of the Evening Post we learn that another plan is about to be tried. It is called "The Home-building Association," and is composed of the solid men of the city. Among them are Messrs. Lenox, Aspinwall, Russel, James and Ketchum. They propose to build houses and sell them at the actual cost and interest, and have contributed a large sum for this purpose. They have purchased a lot of ground in Williamsburgh, I. I., at the corner of

## now in process of completion six buildings. We

 quote:-The plot of land at present owned by the company Ninth and North Eighth streets. Twelve bous North be built on each of the streets, making twentyfour in all. The width of the lots is sixteen feet eight inches, and their depth seventy feet, leaving a space between the two rows of huses sixty feet wide by two hundred feet long. This space it is intended to preoccupants of the dwellings that border on it.
The houses are thirty feet in depth, and are built or a good quality of brick; they are two stories high, with flat root and basement and cellar. They are so divided that the upper floor has three rooms with closets; two of the rooms in brack and one in front. The first or parlor floor has two rooms. The hall, which is comparatively large, divides them. but does not extend from the front to the back of the house-it having been so arranged that the stairs leading to the second story and to the basement are in the middle of the house, and run transversely. By this plan a large back parlor is secured; and the front parlor or recepcomprises cellar and kitchen; these have many conveniences.
The houses will be finished in a plain, substantial and neat manner. The walls are eight inches in thickness, and are well built. The inside work will be tastefal. Cornices and center pieces will ornament the parlors, Gas pipes are laid in erery room, and Bidgewood water is introduced into each cellar. It is impossible not to
ish this scheme to succeed, but, we fear it is a dead tailure. Such houses as are described above could not be built now for less than $\$ 3,500$ or $\$ 4,000$, and, unless two families are to occupy them, no advantage will be gained, for no mechanic, and but few professional men, can afford to live in them. To pay a rent of $\$ 300$ one must be in receipt of at least $\$ 1,500$; and if, in addition to this, we consider the car fares and ferryage, it is easy to foresee that the plans of these benevolent gentlemen cannot succeed. Therefore, the laboring man is no better off than before.
The obvious and only remedy is to build houses where four or six families can live under the same roof. A multitude gathered together do not necessarily generate filth and create dissension, unless there be unworthy members. So, if such dwellings were guarded by porters or janitors, whose special business it should be to see that the several floors were kept clean, the entries tidy, and the water privileges and property generally well treated, we should have dwellings that could be let reasonably, and which would contain all the comforts requisite.
Various improvements could be introduced with economy. The landlord should heat the whole house and light it for so much a month. A furnace in the cellar would do the first, and the gas would perform the latter. Only fuel sufficient for cooking would have to be carried up stairs, and the dust and dirt thus saved would be an item.
We are firm in our faith that workmen can have much better dwellings at a lower price than those mentioned above, and we shall be glad when some promising project appears.

## The "Dictator."

The Dictator and Agamenticus, which left this port on Tuesday morning, Aug. 1st, had an exciting race after they got outside. They finally arrived off Portsmouth harbor, the Dictator torty minutes ahead, notwithstanding the bursting of a tube in one of her boilers, which rendered it for the time comparatively useless. The Agamenticus also claims to have been under some disadvantages, owing to bad coal, etc. From Portsmouth to Portland the monitors will have another trial of speed, and the friends of the Dictator believe that within that distance she can beat the Agamenticus. The Dictator is said to have worked admirably on her passage round to Portsmouth.Boston Advertiser.
[The Agamenticus is a naval-built vessel, ironclad, with a revolving turret on Ericsson's plan. Eus.
The Thirteenth Annual Indiana State Fair will be held in Fort Wayne, commencing on Monday, Oct. 2d, and closing on Saturday, the 7th. The secretary's office will be open at Fort Wayne, for entries in the several classes, on Monday, September 25th.

At a Russian indnstrial exhibition, recently closed, there was a large portrait of Peter the Greal, made up of many colored lucifer matches, contributed by Warsaw firm.

