Although it may require an nour, or two or three hours, to transmit a telegraphic message to a distant city, yet it is the mechanical adjustment by the sender and receiver which really absorbs this time; the actual transit is practically instantaneous, even in respect to the furthest conceivable distance, so far as the current itself is concerned.

Under ordinary circumstances, the electric fluid travels at the mean rate of 20,000 miles in a second; therefore, if it were possible to establish a telegraphic communication with the star Cygni, it would require ninety years to send a message there. The annual parallax of Centauri has been determined by astronomers to amount to a second of arc, which gives about twenty billions of miles as its distance from our system—a ray of light would arrive from a Centauri to us in little more than three years, and a telegraphic dispatch would arrive there in thirty years.

OLEFIANT GAS.—Amongst the remarkable substances formed by the distillation of coal, there is none which has attracted more notice than that known as parafeine oil, now so extensively in use, and which is largely obtained from coal by a peculiar process of distillation, at a very low cost. Parafeine oil may be considered olefiant gas in a liquid state, and M. Berthelot, a French chemist, has succeeded in producing alcohol or pure spirit from olefiant gas. According to his statement of the results of his experiments, when olefiant gas is shaken violently in a glass vessel with sulphuric acid and metallic mercury for a considerable time, it is absorbed; on adding water and distilling the mixture, alcohol is said to pass over, being found on examination to be simple spirit of wine. It matters not from what substance the olefiant gas is obtained, whether from alcohol or from coal gas, the result is the same—a pure alcoholic spirit. Hitherto spirits have been uniformly obtained from vegetable substances, by the distillation of the produce of vinous fermentation.

A NOVEL IMPROVEMENT IN STEAM CANAL NAVIGATION .- Capt. D. P. Dobbins, Secretary of the Board of Lake Underwriters, has exhibited to anumber of gentlemen a new invention of his own, which is not only a great innovation, but appears to wear the aspect of practical success. The invention is a new canal boat, or rather two boats doved-tailed together at the stern, and driven by one engine in the hindmost boat. The boats are to be of the regular size, so arranged that they can be fastened and unfastened at pleasure ; the design being to overcome the resistance of the water to tow boats by one set of machinery, and to tow a third boat astern. On approaching a lock the boats can be separated and locked through, after which they may be again coupled and proceeded on their voyage. Another advantage is also secured, viz : that of turning short curves, as with two boats in two, under the old method, one at least is liable to ground in this The machinery to be used is the Cathcart propeller and stearing instance. apparatus, which will turn a boat in its own length, and thus avoid one very serious cause of annoyance. Many eminently practical men have examined the model and predicted for it entire success.