SCIENCE.

FRIDAY, JUNE 6, 1884.

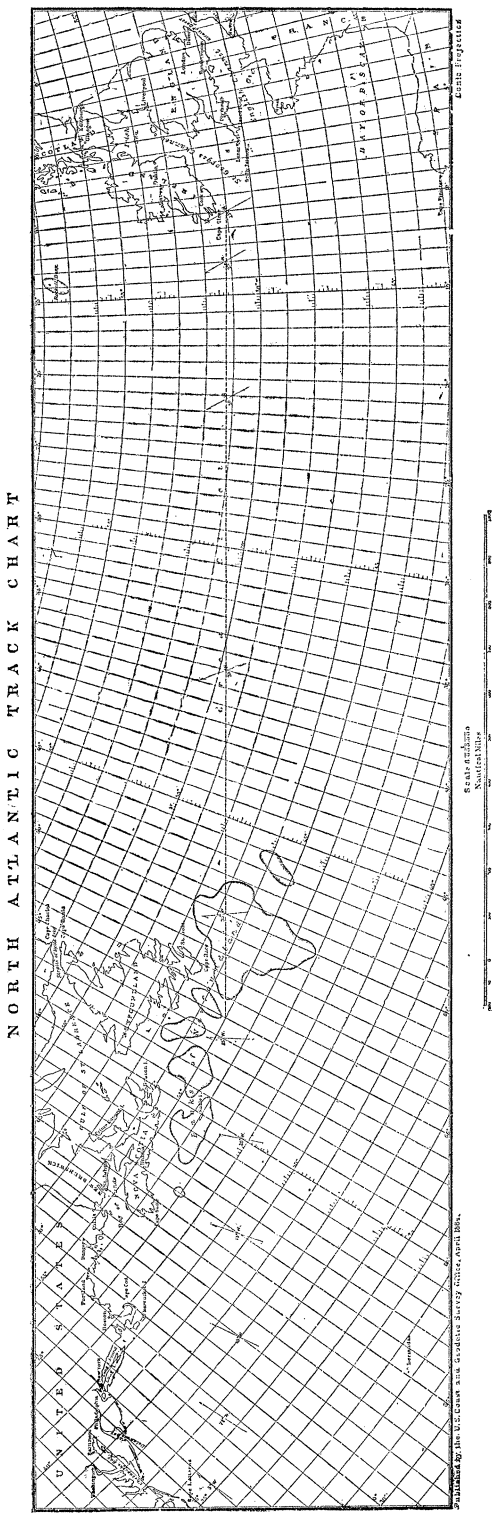
COMMENT AND CRITICISM.

THE rapid strides made in all departments of science, and the fundamental revolutions in some of them, have increased the demand of the public and of publishers for books which shall expound, in clear and simple language, the latest discoveries. Yet publishers look at such books in some measure askance, unable, as a rule, to judge for themselves of their probably permanent or ephemeral value, and always with a very reasonable fear that they will speedily prove antiquated, and become a drug in the market. An apparent attempt to evade the little financial dilemma which the advance of knowledge presents to the vender of literary wares has recently been brought to our notice. Four books, sent us at one time for review, were first examined to see whether they were of sufficiently recent date to notice. *They bore no date.* A careful examination showed that one of them consisted of lectures delivered two or three years ago, but no clew to the age of the others could be found. It was tolerably evident that the very unusual omission was intentional. If intentional, it was, to say the least, a deliberate purpose to evade the purchaser's natural and proper question, Does this book represent present knowledge? We leave to the 'Society for the promotion of Christian knowledge,' whose imprint each of these books bore, to ask itself the question, Is such a practice defensible on the grounds of scientific, Christian, or even pagan morality?

IT is a question to be considered, whether our smaller societies of natural history, to whose meetings we desire to call attention in the columns of *Science*, do not make a mistake in having no plan of work towards the accomplishment of which they can make a united effort, instead of pursuing observation and discussion almost at random. Larger societies in the cities, where publications, and even general collections, are attempted, must naturally cover a broad field: it is not to these that we refer, but to the smaller societies that spring up, too often for but a short life, in our country towns. The desire for large membership, and the admission of members to full standing without any requirement of work accomplished, seems to us another error. Five really industrious members make a very good nucleus for a local club. Others can be added later, on the assurance of some task of local observation actually performed, and of willingness to co-operate towards some attainable end; and beyond this there may, of course, be general meetings, as public and as fully attended as possible, but full membership should in all cases mean work done.

THE coast-survey has just published a 'North-Atlantic track-chart,' executed with the beautiful neatness characteristic of its work, "to illustrate the point, that, in the conic projection, the straight line upon the plane surface of the chart almost exactly represents the great circle contained between its termini, which on other projection will do." A reduced facsimile of the chart will be found on the next page. If this be demonstrated to obtain with sufficient closeness for all latitudes and all courses, the conic projection, in which a part of the earth is represented on a conical surface, tangent or secant about the middle latitudes of the region represented, should replace the common Mercator's or cylindric projection of ordinary sailing-charts, in which great distortion is caused by throwing the geographic lines on a cylinder tangent to the earth's equator.

The advantage usually quoted for the latter projection is, that it enables the navigator to lay out a course having a constant bearing



throughout his ocean-voyage: but this advantage is largely fictitious; for, with better knowledge of winds and currents, it is now seldom found advisable for sailing-vessels to follow such a route; and steamers, that can afford to pay little attention to the weather, prefer the great circle, or shortest-line course, to the longer one, so easily determined on the Mercator chart. The difficulty that stands in the way of the general adoption of great-circle sailing is the complexity of the calculation required in laying out the track to be followed. If this difficulty can be overcome by the use of the conic projection, then the owners of vessels desirous of quick passages can hardly fail to demand its introduction.

LETTERS TO THE EDITOR.

**** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

A colt and its mother's blanket.

MY attention was called recently to the peculiar actions of an orphan colt, which perhaps are worth recording. When the colt was two weeks old, its mother died. Previous to her death, she was covered with a blanket. When it was apparent she could not live, the blanket was thrown over the fence, and the mare removed, and the colt left in the enclosure. The colt was very much exercised at first, ran up and down the yard neighing; but, when it came near the blanket on the fence, it stopped, smelled of it, and seemed pacified. It evidently considered the blanket its mother, and has continued to do so.

If the blanket is removed from the fence, the colt becomes restless, runs about neighing, but is reconciled by the sight of the blanket again.

If one throw the blanket over his back, the colt will follow the bearer all about.

It will graze about in the vicinity of the blanket, but will not go far away, and, when it wishes to rest, will go and lie down by it. F. L. HARVEY.

Fayetteville, Ark., May 20.

The invention of the vertical camera in photography.

In a footnote accompanying an article by Mr. Simon H. Gage, printed in this journal under date of April 11, 1884, on the application of photography to the production of natural-history figures, it was stated, that the only other persons employing a vertical camera in photography, known to the writer, were Dr. Theo. Deecke of the State lunatic-asylum at Utica, N.Y., and Dr. Dannadieu of Lyons, France.

As a matter of fact, the vertical camera, now used for photographing natural-history specimens, etc., is the outcome of a suggestion made in December, 1869, by Professor Baird to Mr. T. W. Smillie, the photographer in the U.S. national museum, Washington, D.C., that the instrument be placed on an incline; the former having observed the difficulty experienced in photographing with the horizontal camera such objects as stone implements, fish, etc. This sugges-