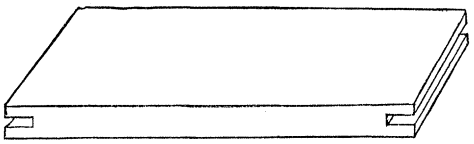
case all the specimens illustrating a single species upon a separate block. A standard size of block is adopted for what may be termed the 'unit block.' The size of this block will depend on the size of the drawers in the cabinet. Other blocks which are multiples of this size are also used. The blocks are made of soft non-resinous wood, basswood, or cucumber-tree. They are cut from well-seasoned boards three-eighths of an inch in thickness. I do not find it necessary to fasten the larger blocks in place in any way, beyond keeping the full number of blocks in each box. In each end of each block there is a groove (see figure). Small hard-wood strips are



made to fit into these grooves. In case of the larger blocks, these strips tend to prevent warping. The narrower blocks, such as would be used to mount a single row of small beetles, are fastened together by means of these strips into groups of three or four. Each of these groups are as stable as a single large block. When the blocks are in place in a drawer, the strips are entirely concealed. As the blocks can be cut with a circular saw, and the grooves and strips made in the same way, they are not necessarily expensive.

J. HENRY COMSTOCK.

TOO MANY NAUTICAL ALMANACS.

ABOUT the most distinguishing feature which characterizes the exertions of men at the present time is that of co-operation. Not only do men act in conjunction with others at home in attaining desirable and similar ends, but there is growing to be more and more a union of purpose for the attainment of such ends throughout the entire civilized world; and this has already assumed proportions never before known in human history. It is amply illustrated in the numerous international conventions, associations, and congresses, only a few years ago quite unknown, or in embryonic existence only in a few scientific heads too wise to propound such things before the eligible moment.

Now, all this is the best sort of evidence of the world's general scientific growth; for the principle of conjoined and united endeavor is based on the broadest science. If, then, the work in any science, or of any body of scientific men, should be more entitled than another to receive, and more willing to accept, the advantages accruing from co-ordination of effort, it would seem that the exact sciences should have the preference. The resolutions of the International prime meridian conference, held at Washington last autumn, are now familiar to all. The action of the astronomer royal of England, the first of January, 1885, in regulating the time-keepers of the observatory in accordance with these resolutions, may be expected to necessitate further changes in the details of observatory work, and the publication of observations, as also modifications in the printing of nautical almanacs and astronomical ephemerides, or a different understanding of them as now printed.

All these matters ought to be definitely settled at no late day; and, as a large number of governments are interested therein, their representatives should convene in a congress for mutual agreement on the details of the modifications to be made. Such a congress might also deliberate upon the advisability of adopting certain suggested improvements of the Gregorian calendar at the end of the present century. Such power should be granted, that the deliberations of the congress might determine, as well as recommend.

Whatever may be said of the national observatories, we are not sure that the deliberations of such a congress, if conducted on the broadest ground, would not lead to a resolution recommending the discontinuance of two or three of the nautical almanacs now published. In so far as the uses of the navigator are concerned, all nations will now experience the need of a nautical almanac for their several meridians, much the same as all patent-medicine firms and pill-venders feel the need of an almanac and calendar for the conservation of individual interests: it saves themselves and their patrons the indignity of referring to somebody's else almanac, and advertises the fact that they are enterprising enough to have one.

Howbeit, whether or not heroic measures of this sort are advisable, — resulting in a saving to astronomical science of from seventy-five thousand to a hundred thousand dollars a year,

an amount which might be jointly contributed by the several governments to the maintenance of mountain observatories, directed by an international commission, or of an international computing bureau for the complete utilization of the masses of observations accumulating the world over, and for the encouragement of research in theoretic astronomy, — it is certain that the deliberations of such a congress could not fail to advise governmental co-operation in the preparation of the nautical almanacs now existing. National pride aside, and this might be done in a multitude of ways, most prominently in the case of the preparation of the data relating to the moon. Take, for example, the hourly lunar ephemeris and the lunar distances as printed each year in the British nautical almanac and the American ephemeris. These data occupy about one-third of the entire number of pages of each of these publications; they are now prepared independently by the two offices, but are, when printed, substantially identical in both; and, further, the work being done at about the same time in the two countries, the results of the one do not serve any sufficient purpose as a check upon the accuracy of the other. The cost of this part of the almanac alone to each nation amounts to several thousand dollars annually, — an amount which might be reduced one-half by the preparation of these data conjointly, to say nothing of other immediate and favorable results which might be secured by such co-operation.

We should not like, however, to give the impression that this had never been thought of before, nor indeed that steps had never been taken toward securing such co-operation. It is frequently the best policy to let well enough alone; and we do not fail to recognize the fact that it is very often wise to leave a thing as it is, just because it has always been so: in fact, we are conservatives ourselves, though not that precise type of conservative, which, as we speak of the moon, recalls Douglas Jerrold's characterization as one who would "refuse to go out when there's a new moon; and all out of love and respect for that 'ancient institution' — the old one." The wisest conservatism would appear to suggest the annual publication by the nations conjointly of a single volume of astronomical predictions, which, in addition to other improvements, should combine all those desirable features not dependent upon individual meridians, and which in some degree characterize all the astronomical ephemerides of the several governments. The contents and arrangement of the articles of such an ephemeris could only be determined by an international conference. While this may be little better than mere speculation, any one who has the four principal ephemerides in constant use will readily recognize how small a portion of each is employed, and, with extended interpolation-tables, how little the inconvenience of using the ideal ephemeris solely would be.

THE GEOGRAPHICAL WORK OF THE GREELY EXPEDITION.

The general features of the geographical work of the Lady Franklin Bay expedition may be of interest to the readers of *Science*, in connection with the map furnished through the courtesy of Capt. J. R. Bartlett, chief hydrographer U. S. navy. The details are reproduced from photographs of charts made at Fort Conger by the late First Lieutenant James B. Lockwood, U. S. army, of his and my work.

The expedition fitted out by the war department under the supervision of Gen. W. B. Hazen, chief signal-officer, and commanded by me, left St. Johns, Newfoundland, July 7, 1881. After a remarkably successful voyage, the party landed on the shores of Discovery Harbor, just south of Robeson's Channel. The station called Fort Conger was in latitude 81° 44′ north, longitude 64° 45′ west. The site was the same as that occupied by the stores landed from the English ship Discovery, of the Nares expedition, 1875–76. During the autumn, as much work as possible was done towards establishing depots for use of exploring-parties the following spring. The sun, returning after an absence of one hundred and thirty-five days, found the party well and in good spirits. Parties were immediately put into the field to establish advance depots; and