tory, would have given us one of the noblest creations of genius, — one full of inspiration to every master and drudge of science. But the poet is too late: the career he should invent has been lived in reality by Darwin. Can any one contemplate it, and not feel that it is beautiful?

The biography of Darwin is a theme worthy of genius: it should be written with eloquence, as well as with insight and discrimination. But Darwin's life possesses so much inherent interest, that any conscientious narrative of it must be meritorious. Dr. Krause furnishes us with a biography the preliminary character of which is frankly confessed. It is not in any sense the great work we hope for, nevertheless it deserves genuine praise. The author gives a vivid and loving sketch of Darwin's career, and adds enough of the personal history to convey a clear impression of his character, which was so pure and open, that its noble traits impressed not only his friends, but also all who knew him. Indeed, there are many who feel that the man was finer than any of his works. Dr. Krause, as was natural for the editor of the German evolutionary magazine, Kosmos, has made his book more than a personal history by including an account of the rise and triumph of the Darwinian theory. All this is so well done, that the book affords a very clear idea of the inception of the theory, and of the leading episodes of the prolonged warfare which was initiated by the publication of the 'Origin of species.' It is certainly a very interesting history, plainly but well told. Moreover the volume, albeit not large, contains a sufficient outline of all Darwin's chief investigations. The principal excellence of the work, however, lies in the correlations it establishes between Darwin's labors and both the circumstances of his life and his personal traits. In short, we commend the book as the best available source of a general knowledge of Darwin. The volume gains in interest by a couple of fairly good portraits - a view of Darwin's home at Down, a facsimile of an autograph letter — and the publication of a not inconsiderable number of letters from Darwin to various German naturalists. It is well printed in clear Roman type, not in Gothic abominations. It may be noted, that it is to be followed by a companion volume of translations into German of such of Darwin's smaller writings as have not previously appeared in that language. We hope that this biography will be soon published in English translation.

We have endeavored to express the twofold

nature of the interest Darwin excites. Dr. Krause portrays his greatness, but his fame must be explained more fully hereafter by some profound philosopher who knows thoroughly and understandingly the intellectual history of the nineteenth century.

## EDIBLE AND POISONOUS FUNGI.

ALTHOUGH the larger fungi, popularly called toadstools and mushrooms, are not so dangerous as is generally believed, it is certainly a difficult matter for the public to distinguish between the forms which are edible, and those which are injurious, or even fatal. The two charts, with twelve colored plates by Prang, are intended to aid those who are not botanical experts, in recognizing some of our more common edible and poisonous species. With each plate is a brief description of the species figured, and directions for cooking; and, under the heading of 'general directions,' Mr. Julius A. Palmer gives a short account of the distinctions between poisonous and edible fungi. The plates are, in general, well executed and characteristic; and some of the best edible species, as Coprinus comatus, would be recognized, without hesitation, by the most inexperienced. The plate showing puffballs is not well done from a botanical point of view; and, with regard to the plates in which several different species are shown in one group, it may be said that the effect is confusing; especially in the plate of Russulae, where, after the directions for cooking, the warning is added, "the noxious members of this family resemble the esculent so closely, that, to the amateur, tasting each one as gathered is the only guide; the hurtful ones being always hot and acrid." In such a case, one would suppose that plates would be of little use to the general public. In continuations of this work, it is to be hoped that the crowding of several species on one plate will be abandoned.

If Americans do not make use of fungi to the same extent as some other nations, it is, perhaps, quite as much owing to their ignorance of the way to cook them, as fear of mistaking the edible and noxious forms. Numbers of our common species are delicious when well cooked : but on the other hand, as usually prepared for the table, they are quite the reverse; and, until the number of good cooks is much greater than it is now, we can hardly expect fungi to become a very popular

Mushrooms of America, edible and poisonous. By JULIUS A. PALMER, jun. Boston, Prang, 1885. article of food. The mycophagists of the country are not as yet numerous; but they sometimes do an injury to their cause, by recommending the use of certain species of which perhaps the best that can be said is that they are not injurious. Agaricus procerus, and Boletus strobilaccus, figured in the present work, would not strictly be called edible, except by an enthusiastic mycophagist. We imagine that one whose first experiment in funguseating was made upon either of the species just named, would hardly be likely to repeat the experiment.

## ROHÉ'S HYGIENE.

This book, of small size and modest appearance, is full of important matter, told in a very interesting manner. The preface says it is intended as a guide to the principles and practice of preventive medicine; and we think that every student of medicine should possess it, and study it. Air, water, food, clothing, soil, dwellings, hospitals, camp-life, and numerous other every-day topics, are discussed in condensed sections, but with clearness and intelli-There are some points, however, gence. which we think should receive greater attention. For instance, in giving the tests for air and water impurities, nothing is said of the methods of analyzing these media for germs. A short paragraph states that the air is the bearer of germs, and that quantitative analyses of the same have recently been made. Although the methods of such analyses are elaborate, and too expensive for students in general to undertake, nevertheless they ought to be explained in a text-book of this kind.

Emphasis is properly laid upon the dangers from sewage in drinking-water. Dr. Rohé takes exceptions to the statement, that rivers quickly purify themselves; and he quotes the report of the Massachusetts board of health for 1876, in which the foul condition of the Blackstone River was proven. He rightly claims that the rate of self-purification for rivers is limited, and may be easily exceeded by the rate of sewage pollution. The danger from using polluted ice is also described and illustrated by reference to cases of disease caused by such ice. Water does not purge itself of impurities by freezing.

The proof-reading of the book seems to have been hastily done, as we notice numerous errors of spelling. We heartily recommend the book, and praise it for the sincere and unaffected spirit in which it is written.

## THE RESCUE OF GREELY.

In welcoming Lieut. Greely to the meeting of the geographical section of the British association last summer, Capt. Bedford Pim, himself an arctic traveller of great experience, said that on one of the early expeditions in search of Sir John Franklin, the American ships were observed dashing into the ice ahead of their English companions. "Yes," said an old quartermaster: "they fears nothing, because they knows nothing." But now, since the return of Greely, the gallant captain added, it was evident that "the Americans knew every thing, and feared nothing." This, too, must be the verdict of every one who reads this book, and sees the way in which Schley and Emory, in two Dundee whalers, not merely kept pace with the best ships in the Dundee whaling-fleet, but, pushing by them, rescued Greely and his dying comrades hours, if not days (considering the uncertainties of ice navigation), before the other ships could have reached Cape Sabine, thus saving the lives of several of the party.

It makes an interesting story, and is well told by Professor Soley, who, we suppose, wrote the greater part, if not all, of the narrative. The introductory chapters on the gateway of the polar seas and the circumpolar stations, are too brief to be of much value; while the account of the two previous attempts to reach Greely contains little that will aid one in forming for himself an opinion as to where the responsibility for the deaths of nineteen out of the twenty-five members of the Lady Franklin Bay expedition really belongs. The volume further contains a few good pictures; a track-chart showing the route of Schley's vessels; and the official chart of the region from Baffin Bay to Lincoln Sea, first published in Science last February.

## NOTES AND NEWS.

A LETTER from Dr. Willis Everette, U.S.A., who recently arrived from St. Michaels, Alaska, at San Francisco, states that his original plan of crossing from the headwaters of the White-river branch of the Yukon to the Copper River, was defeated by the impossibility of getting any companion, either white or native, to undertake the voyage with him. Being thus unaccompanied, he was incommoded by the behavior of the Upper Yukon Indians, who endeavored to purloin his supplies; and therefore he descended

The rescue of Greely. By W.S. SCHLEY and J.R. SOLEY. Illustrated from the photographs and maps of the relief expedition. New York, *Charles Scribner's Sons*, 1885.

A text-book of hygiene. By GEORGE H. ROHÉ, M.D. Baltimore, Thomas & Evans, 1885. 8°.