cies, prose which with the slightest difference in the handling, would become real poetry. For we have suffered long enough from metrified English Æneids, ranging from pretty poems that are not Virgil to barbarous experiments with barbarous hexameters. H. H. Ballard's recent version in hexameters is not barbarous; in many passages it is surprisingly effective. But whatever further experimentation may produce, the English dactylic hexameter is not an heroic measure; Matthew Arnold in his essay on the translation of Homer proved that it was, only to spoil his proof by giving illustrative renderings. The only English equivalent of the classical hexameter is, as Milton showed once for all, blank verse. But blank verse is a special danger to the translator: since it is the easiest of measures to construct, it most easily lapses into prose.

Mr. Williams has attempted the impossible with high success. He has built the lofty rhyme of blank verse and kept it lofty. His version is essentially exact; few important meanings are lost, and few intruded. The quality is poetic throughout, and the movement is sustained. We have tested the work minutely for important points, and have read large sections at a stretch; it reads. The rendering of a famous passage from Book iv will illustrate the difference between this version and an earlier essay at blank verse, C. P. Cranch's, which, striving for absolute literalness, misses the real goal of translation. This first is Cranch's rendering:

- 'T was night; when every weary frame was sunk
- In placid sleep; when woods and seas were still;
- When in their middle courses rolled the stars;
- When every field was hushed, and all the flocks.
- And all the gay-winged birds, whether they fly

Abroad o'er liquid lakes, or haunt the fields With bushes rough, in night and sleep reposed.

- Cares were smoothed down, and hearts forgot their woes.
- But not the unhappy queen. She finds no rest:
- Nor with her eyes or heart receives the night.
- With double weight her cares increase. Love wakes
- Again, and rages, on the swelling tide Of anger fluctuating.
- Mr. Williams turns it thus:
- Soon fell the night, and peaceful slumbers breathed
- On all earth's weary creatures; the loud seas
- And babbling forests entered on repose; Now midway in their heavenly course the stars
- Wheeled silent on; the outspread lands below

Lay voiceless; all the birds of tinted wing,

And flocks that haunt the marge of waters | a good but rather desultory education. wide

- Or keep the thorny wold, oblivious lay Beneath the night so still; the stings of care
- Ceased troubling, and no heart its burden knew
- Not so the Tyrian Queen's deep-grieving soul!
- To sleep she could not yield; her eyes and heart
- Refused the gift of night; her suffering
- Redoubled, and in full returning tide

Her love rebelled, while on wild waves of rage

She drifted to and fro.

Neither translator quite catches Virgil's "oculisve aut pectore noctem accipit," of which Tennyson's "Ever failed to draw the quiet night into her blood" is a brilliant variation. Other defects in detail occur in the new version, but it would be unjust to its high merits to point them out: the vital element is here.

Mr. Williams prefaces his translation with a brief essay on Virgil, with part of which we are forced to disagree. He finds in the poem "a too visible erudition, an unconvincing epic scheme, a perplexed and perplexing hero." How any success is possible for a work with such failings is hard to see, but the failing is rather in the view of the critic. Virgil's epic scheme and the nature of his hero become apparent when we appreciate that he was writing tragedy as well as epic. But Mr. Williams may think what he will of the purpose of the Æneid, if he can give us such a translation as this. It should reveal Virgil's secret to many who hitherto have been kept away by the barrier of a "dead language."

Science.

Notes of a Botanist on the Amazon and Andes. By Richard Spruce; edited and condensed by Alfred Russel Wallace. 2 vols. New York: Macmillan Co. \$6.50 net.

It is not easy to select from the voluminous notes of a specialist matters which will be of general interest, and the task becomes more difficult when the observations of more than fifty years ago are to be freshened into new life. But Mr. Wallace, who shares with Darwin the distinction of having offered to the scientific world the most stimulating suggestion of modern times, has given to the most special matters a great attractiveness, and he has made them seem like notes taken during the past year instead of half a century ago. Few persons could have done the editing so well. He has chosen the most important and interesting memoranda, and has connected these by luminous comment.

By the time he was of age he was fitted to act as tutor in a school at Haxby, and a little later he became mathematical tutor in a collegiate school. He had a fair knowledge of Greek and Latin, a good working acquaintance with French. Spanish, and Portuguese, and as explorer he acquired colloquial familiarity with aboriginal languages. Owing to infirm health, he gave much time to outdoor occupations, and fell naturally into the practice of collecting and studying the plants of his native country, Yorkshire. In this work he was very successful, both as an observer and as an identifier of doubtful species. Mosses and their nearest of kin, the livermosses, or hepatics, soon became his speciality, in which before long he was an authority. He made a journey of exploration through a part of the Pyrenees, with fruitful results, the most notable of which was the improvement of his health. Finally, he resolved to visit the valley of the Amazon. Arriving in 1849 at Pará, he devoted the next fifteen years to arduous work in collecting plants. With treacherous health and scanty means, he made long journeys and counted all his perils and sufferings as trifles compared with the scientific results obtained. He had a singular knack of getting into serious difficulties and of extricating himself after a fashion, frequently with loss of collections, but seldom with loss of his patience.

The districts explored by Spruce were in part those which were visited by Humboldt, Wallace, and Bates, and which have inspired some of the most vivid descriptions of the luxuriance and prodigality of the tropics. Among these graphic descriptions, some of Spruce's notes deserve a place. Here and there we come upon a hint of the activity of speculation which kept Spruce always on the alert for unusual forms of plants and for exceptional phenomena. For instance, he says:

A few sorts of trees, including some palms, are supported on exserted . . . roots. . . In England, an old willow or other tree standing by a river, whose floods have washed away nearly all the earth from its roots, may give an idea of this form: which. however, is constant in many Amazon, trees whose roots have never been exposed to denudation by the action of water, whatever may have been the case with the prototypes of those trees. These examples led me to conjecture, at first, that the sapopema form itself might have taken its rise from denudation in the remote ancestors of the existing types of trees; or at least that sapopemas were at first a sort of scaffolding to raise the crown of the root above the reach of inundations: and I am still willing to believe that to this cause their origin may be partly traced (Vol. I, 22).

This was written in 1849. The Wallace and Darwin essays, setting forth the Richard Spruce, born in 1817, received theory of evolution, were not read at the

Linnean Society in London till 1858. In 1871, after Spruce's return to England, he lost all doubt as to the origination of adaptive and connecting forms, as will be seen by the following quotation from a letter to a correspondent:

I have gone thoroughly over all my South American plagiochilas [certain hepatics], have described all the forms, and have made up my mind as far as possible about the species. The result has been to make me more Darwinian than ever. I feel certain that if we had all the forms now in existence and that have ever existed, of such genera as rubus, asplenium, bryum, and plagiochila, we should be unable to define a single species: the attempt to do so would only be trying to separate what nature never put asunder; but we should see distinctly how certain peculiarities had originated and become (temporarily) fixed by inheritance; and we could trace the unbroken pedigree of every form.

The reader can now understand why Wallace is a sympathetic editor of Spruce's notes.

To botanists the author's notes about plants possess uncommon interest on account of their accuracy and suggestiveness, but the pages devoted to travel and adventure will attract every reader. Spruce passes lightly over all his dangers and discomforts in a surprising manner, and inspires his readers with a strong wish to accompany him in his short excursions into places wholly unexplored. Probably, however, it is the ethnologist who will be likely to gain most information outside of the field of botany. To indicate the author's method of dealing with uncommon matters, a single citation must suffice. from a chapter devoted to the stimulants and narcotics of the Amazon Valley and the Orinoco. Some of these inebriants have been long known and well described, but the following account will strike many of our readers as quite new. The drink under consideration is made from a plant, banisteria caapi, a woody climber belonging to a family having over six hundred tropical species, and none in the temperate zones:

In November, 1852, I was present, by special invitation, at a dabocuri, or feast of gifts, held in a mallóca, or village house, (Turkey-buzzard's called Urubú-coará nest), above the first falls of the Uaupés . . . We reached the mallóca at nightfall, just as the botútos, or sacred trumpets, began to boom lugubriously within the margin of the forest skirting the wide space kept open and clear of weeds around the malloca. At that sound, every female outside makes a rush into the house, before the botutos emerge on the open; for to merely see one of them would be to her a sentence of death. We found about 300 people assembled, and the dances at once commenced. . . . The cup-bearer-who must be a man, for no woman can touch or taste caapi-starts at a short run from the opposite end of the house, with a small calabash containing about a teacupful of caapi in each hand, muttering "Mo-mo-momo-mo" as he runs, and gradually sinking | gestive discussion.

down until at last his chin nearly touches his knees, when he reaches out one of his cups to the man who stands ready to receive it, and, when that is drunk off, then the other cup. In two minutes or less after drinking it, its effects begin to be apparent. The Indian turns deadly pale, trembles in every limb, and horror is in his aspect. Suddenly, contrary symptoms succeed: he bursts into a perspiration, and seems possessed with reckless fury, seizes whatever arms are at hand, . . . bow and arrows, or cutlass, and rushes to the doorway, where he inflicts violent blows on the ground or the doorposts, calling out all the while, "Thus would I do to mine enemy (naming him by his name), were this he!" In about ten minutes the excitement has passed off, and the Indian grows calm, but appears exhausted. Were he at home in his hut, he would sleep off the remaining fumes, but now he must shake off his drowsiness by renewing the dance. .

White men who have partaken of caapi in the proper way concur in the account of their sensations under its influence. They feel alternations of cold and heat, fear and boldness. The sight is disturbed, and visions pass rapidly before the eyes, wherein everything gorgeous and magnificent they have heard or read of seems combined; and presently the scene changes to things uncouth and horrible.

"Gardens, Past and Present," by K. L. Davidson, is imported by Charles Scribner's Sons. The absurdly thick soft paper on which this book is printed gives it a serious handicap in competition with garden works of similar size; but the illustrations on the paper required for half-tones are really good, and the text is above mediocrity. The little historical sketch of gardens and gardening is well done, especially the account of the new and important experimental garden at Wisley. It appears that G. T. Wilson, a hard-worked business man, had at Weybridge one of the pleasantest forms of avocation, namely, the care of a garden with a spacious orchard-house. His leisure was so scanty that he had to prune his trees by candle-light. After having succeeded well with fruits, Wilson turned his attention to the growing of lilies with such assiduity that he soon was nicknamed by his admirers "Lily Wilson." On retiring from active business, he purchased an estate of sixty acres, at Wisley, six miles or so from Weybridge, and here he began with characteristic vigor to found a wild garden. The soil was exactly what was needed, for even our capricious trailingarbutus, or mayflower, could be made to "grow rampantly in the oak-wood." It is said that thousands of species and varieties of plants were speedily introduced, and all were made to feel at home. Wild plants and cultivated grew side by side, and this continued until the death of the founder, about twenty-five years after. Then the garden at Wisley began its new life. Instead of falling into unsympathetic hands, it became the property of Sir Thomas Hanbury, the owner of the celebrated garden at Mentone, and was soon conveyed by him to the Royal Horticultural Society, for experimental purposes. The author of this little treatise does not give minute directions in regard to the cultivation of plants, but offers rather a broad and often sug-

The centenary of Darwin's birth is celebrated in Germany, together with the seventy-fifth birthday of Ernst Haeckel (February 16), by several publications reminding the student of the great English Naturforscher. Dr. Heinrich Schmidt of Jena has translated for Alfred Kröner (Leipzig) Darwin's well-known work under the title "Geschlechtliche Zuchtwahl." Die Hilfe (Berlin: Schöneberg) publishes under the editorship of Max Apel a series of papers dealing with Darwin and his time. To this series Wilhelm Bölsche contributes "Darwins Vorgänger"; Bruno-Wille, "Wie die Natur zweckmässig bildet"; Eduard David, "Darwinismus und soziale Entwickelung"; Max Apel, "Darwinismus und Philosophie"; Rudolf Penzig, "Darwinismus und Ethik"; and Fr. Naumann, "Religion und Darwinismus." Still another publication, "Kosmos: Handweiser für Naturfreunde," contains, besides a Gedenktafel and portraits of Darwin, Cuvier, Lamarck, Nägele, Haeckel, Pauly, De Vries, and Weismann, essays by R. Francé on "Darwin der Forscher," by Dr. Kurt Floericke, "Darwin als Ornithologe"; Dr. H. Dekke, "Darwins Einfluss auf die medizinische Wissenschaft"; J. H. Fabre, "Wissenschaft und Charles Darwin"; and Wilhelm Bölsche, "Darwin als Reisender." There are also papers on "Darwins Vorläufer" and Darwin's personal life.

Dr. William Tillinghast Bull of New York, in his prime one of the most distinguished surgeons of America, died at Savannah February 22, in his sixtieth year. He was born in Newport, R. I., was graduated from Harvard College in 1869, and from the College of Physicians and Surgeons in this city in 1872. Later he studied abroad. At one time and another he was attached to various hospitals in New York and for many years he had been professor of the practice of surgery in the College of Physicians and Surgeons. He was a pioneer in some of the now common operations in abdominal surgery, such as that for appendicitis. He had also devoted much attention to cancer in its various forms.

Dr. Frederick Irving Knight, a specialist in diseases of the throat and chest, and for many years professor in the Harvard Medical School, has died in his sixty-eighth year. Besides his work in the Massachusetts General Hospital and in various societies, he contributed a number of papers to medical journals.

Drama.

There is no more interesting and fruitful literary topic than a comparison of the Greek and English dramas. And notwithstanding the excellent treatment of the question by Paul Stapfer and others, there is still much that may be said. One is naturally, therefore, well-disposed toward such a work as L. M. Watt's "Attic and Elizabethan Tragedy" (E. P. Dutton & Co.), and would like to say of it all the good possible. But what can be done with an author who writes habitually in such a style as this?——

Thus, the hellish terribleness of the crime in "Macbeth" is made immeasurably more