

observation than any other germ. Its power rose and remained constant for three years, when it suddenly lost its high degree of virulence and failed to kill.

L. B. Mendel, of Yale University, in a paper on "Factors Relating to the Role of the Inorganic Components of the Diet," showed the action of various foods on the neutrality of the blood. It is possible to introduce acid into the blood without making the latter acid, it being the function of the kidneys to maintain the neutrality. Too much acid causes oedema, or accumulation of fluid, or nephritis. The acid may be removed by excretion in the urine, which changes in its solubility for uric acid. It is generally known that it is desirable that this should be easily soluble in the urine, but Professor Mendel shows the effect in increasing this solubility of a large number of foods, particularly fruits and vegetables.

Dr. H. A. Kelly, of the Johns Hopkins Hospital, reporting on "Radiotherapeutics in Surgical Affections," gave an account of the remarkable success of the use of radium in the treatment of cancer, and stated that this was at present the most hopeful treatment of that disease. The action of the radium rays is quite different from that of the X-rays, and while burns are sometimes produced, they are not permanent nor dangerous. The action of the radium is very prompt, and it does not necessitate long confinement in a hospital, nor does it interfere with the resort to surgery in case of its failure. A number of photographs showed the startlingly rapid and complete elimination of cancerous growths, sometimes in a few days. It was stated that the sooner a patient applies for treatment the more likely the possibility of effecting a cure.

A. H. Pfund, of Johns Hopkins University, described the measurement of stellar radiation by means of a wonderfully sensitive thermo-couple used in vacuo, and placed in the focus of the thirty-inch reflecting telescope of the Allegheny Observatory. The sensitiveness is so great that the heat of a candle could be detected at a distance of eight miles. Good-sized deflections were obtained from Vega, Jupiter, and Altair, and with a more sensitive galvanometer these would be much increased. J. A. Anderson, also of Johns Hopkins, explained a method for testing screws, by which the new screws for ruling diffraction engine gratings are tested and brought to perfection by the application of an optical interferometer on the screw before mounting. The use of these methods enables the art of ruling these gratings, made famous by Rowland, an art lost after his death, to be again successfully practiced.

G. F. Becker, of the United States Geological Survey, and A. L. Day, of the

Geophysical Laboratory of the Carnegie Institution, described "Fresh Experiments on the Linear Force of Growing Crystals," showing that small crystals forming from solution might sustain and raise a weight of eighty kilograms, and that apparently negative results were explained by an imperfect distribution of the pressure.

A. G. Webster, of Clark University, exhibited a new portable phonometer, or instrument for measuring the loudness of sound, the present instrument being for a particular pitch nearly as sensitive as the ear, and giving the measurement in absolute measure. The instrument was used by L. V. King, of McGill University, Montreal, who, in a paper entitled "Phonometric Characteristics of Fog-Signal Equipment," described the exploration of the acoustic field of the fog signal at Father Point, on the lower St. Lawrence, this being the first such survey ever made, for lack of a suitable measuring instrument. It was shown how the sound frequently falls off in an irregular manner, owing to the varying temperature of the air over the currents in the water. The output of sound energy in the horn was studied by an ingenious application of a resistance thermometer to obtain the temperature of the air before and after passage through the sounding apparatus.

In the business meetings several matters of importance for improving the efficiency of the Academy were discussed, particularly the publication of regular proceedings. It is safe to predict that the Academy is now entering on a career of increased usefulness and greater distinction. Mention must be made of the enjoyable social courtesies provided by the Baltimore members, including a reception by ex-President and Mrs. Remsen and a dinner at the Maryland Club.

ARTHUR GORDON WEBSTER.

Worcester, Mass., November 22.

Drama

Shakespeare as a Playwright. By Brander Matthews. New York: Charles Scribner's Sons. \$3 net.

To judge from internal evidence, this is in part a compilation of matter prepared for professorial lectures to college classes. And naturally it traverses much familiar ground. But it possesses some distinctive merits. It is attractive in style, quotes freely and aptly from acknowledged authorities, exhibits full and accurate knowledge, and discriminates carefully between what is actually known—giving chapter and verse in support of its assertions—and the more or less plausible deductions of guesswork. Thus the sketch of Shakespeare's life, with which it begins, while inclusive of every trustworthy detail

brought to light by modern investigation, rigorously rejects every uncorroborated legend. It is a scholarly and conscientious bit of work.

Professor Matthews is equally sound and careful in his description of the conditions prevailing on the Elizabethan stage. And his analyses of the Shakespearean plays, their origin, structure, and authenticity, are full, shrewd, and perceptive. But in his main endeavor to determine the chronological order of them from their general literary and constructive character, and so to trace the course of development of the author as a dramatist and poet and to define his status as actor and manager, he is apt to be more fanciful and ingenious than convincing. It is only fair to add that he is never unduly dogmatic, but readily admits the conjectural quality of his arguments. Many of these are sufficiently plausible, but others, as he sees, are controverted by indisputable facts. What he really proves, if unconsciously, is that the whole subject is involved in such uncertainty that it is impossible to formulate a consistent theory concerning it. One of his difficulties is to account for the comparatively adroit stage-craft displayed in a piece admittedly so early as "The Comedy of Errors," and the slovenly construction of some of the far more notable plays which followed it, the sudden access of skill in the tragic masterpieces, and the disappearance of that skill in later productions almost equally remarkable for poetic genius. It is an interesting problem, but there are so many known and unknown terms to the equation that any attempt to solve it now seems hopeless.

As to the notion that Shakespeare, like many of our modern play-makers, devised certain characters to fit particular actors, that may or may not be true. It is not quite so plausible, perhaps, as Professor Matthews seems to believe. We know nothing, or very little, of the actual histrionic accomplishments or abilities of the Elizabethan players. The reputation of Burbage himself may almost be called mythical. All that we can safely assume is that in tragic parts he pleased his auditors better than anybody else. But we have no standards of comparison, no such records as exist of the manner and methods of the great actors of a later generation. Shakespeare, writing for a stock company, must have known, of course, what players would be likely to be cast for his characters, whether tragic or comic, but to hold that his inspiration was in any way limited, or greatly influenced, by his comprehension of the histrionic capacities of particular performers is to adopt more than one violent presumption. It implies either that Shakespeare might have written better than he did, had he not been fearful of overtaxing

his interpreters, or that his leading actors, some of them boys, were incomparably greater artists and geniuses than we have any reason to suppose. It is altogether probable that Shakespeare may have devised a line of business, or an occasional phrase or episode, with some special player in mind, but this is as far as speculation can safely go. Like other dramatists, he had to be content with the best players he could get.

An interesting feature of the book is two maps, one of London at the end of the sixteenth century, showing the places with which Shakespeare was identified, and the other of the same neighborhood as it is to-day.

In our issue of November 13 Lady Gregory's "Our Irish Theatre" was wrongly credited to Henry Holt & Co. It is published by G. P. Putnam's Sons.

"Nowadays" is a three-act comedy by George Middleton, which Holt will shortly publish.

Mr. G. K. Chesterton's "Magic," which he calls a fantastic comedy, is announced for immediate publication by Putnam's.

"Cymbeline," a posthumous volume by Horace Howard Furness, will soon be added as Vol. XVIII to Furness's New Variorum edition of Shakespeare.

The first appearance of Forbes-Robertson in this country as Shylock was awaited with much interest. He never attempted the character in London until his farewell engagement at Drury Lane, although he had played it in Manchester and elsewhere. Some of the English critics described his interpretation as a new reading, in which a certain fictitious nobility was imparted to the Jew by representing him as inspired by racial and religious zeal. Henry Irving, undoubtedly, tried to do something of this kind when, in the latter half of the trial scene, he assumed an air of patriarchal dignity. The theatrical effect which he created was most impressive and pathetic, but it was achieved at the cost of consistency. He exhibited two distinct personalities. In his performance in the Shubert Theatre Forbes-Robertson committed no such artistic error. His embodiment, in all its parts, was consistent with itself and with the plain meaning of the Shakespearean text. He made it clear in the beginning that he hated Antonio because he was a Christian and a foe to usury—laying a notably venomous emphasis upon the declaration—and that motive was evidently the mainspring of his subsequent action. In this respect he followed traditional lines, but his portrayal, as naturally would be expected, was nevertheless strongly individual, revealing much more artistic intelligence than power of dramatic passion. In the street scene, in that whirlwind of conflicting emotions—rabid hate, wounded avarice, and outraged affection—he was by no means the equal of Edwin Booth, whose passionate utterance at this point was torrential. He lacked the physical stamina or the histrionic impulse to illustrate the full fury of that storm, but he indicated the ravages of it with unfailing comprehension and infinite dexterity. His acting, in this crisis, was at least equal to that of Irving and only second to that

of Booth, but disappointed the expectation aroused by his masterly work in the opening acts, in which his ideal of Shylock—a man full of latent strength, keen, supple, vindictive, and sardonically humorous—was sketched with extraordinary vitality and elaboration of detail. Here his elocutionary skill and his power of facial expression were displayed to great advantage. No actor of recent days, not even Booth, has so charged the lines of the Jew with vocal significance. And in the first half of the trial scene he was equally successful, playing with remorseless and malignant intensity, and his portrayal of utter collapse, after Portia's triumph, if less theatrically effective than more violent agitation, was certainly more pathetic and perhaps more true. His Shylock, although conservatives may carp at some of the little touches of modern realism which he introduces, will be accounted one of the three best known to this generation, while his representation of the comedy as a whole has been excelled only by Irving.

"Grumpy," the new play which Cyril Maude has produced at Wallack's, is an ingenious and interesting melodrama, though not calling for critical consideration. But his performance of the central character, an octogenarian lawyer, who undertakes the solution of a criminal mystery in which his domestic happiness is involved, is uncommonly clever. His portrayal of an enfeebled body animated by an energetic will and an arbitrary but affectionate temper, showed a remarkable mastery of all the merely external mechanism of eccentric comedy. Mr. Maude is evidently a very able actor; that he is a great one is yet to be proved.

Mr. Chesterton's "Magic," recently produced at the Little Theatre in London, seems to have puzzled the critics a good deal. A. B. Walkley writes of it:

You never know what he is driving at, for the excellent reason that he hasn't begun by knowing it himself; one fancy, or one word, suggests another *à la fortune du pot*. Thus the word "vegetarian" suggests the fancy "militant vegetarians," and "militant" suggests Joan of Arc, and Joan suggests anti-vegetarianism because of her famous stake (steak—oh, no! decidedly Mr. Chesterton is not particular), and so on.

Edward Milton Holland, who died suddenly in Cleveland on Monday, aged sixty-five, although never numbered with the great actors, was a performer of substantial ability and sound training. His death inflicts upon the stage a loss which it can ill afford in these days. For many years he has occupied a distinguished place among American comedians, being recognized everywhere as a player of refinement and versatility, gifted with a rich vein of dry humor. He was a son of the famous old comedian, George Holland, so long associated with the Wallack stage, and he himself made his first appearance before the footlights on those celebrated boards in 1855, when he was only seven years old. He was Master Thompson in "Parents and Guardians." One of his best achievements was his Gerridge in "Caste," and he was also an excellent Cool in "London Assurance." After brief experiences at Booth's Theatre and the Union Square, he became a member of the company at the Madison Square Theatre in 1883, and took a prominent part in many of the productions made

there. A notably successful impersonation on his part was his Captain Redwood, the detective, in the successful play, "Jim the Penman." He made another hit in "Captain Swift," and gave an excellent performance of Gregory Goldfinch in "A Pair of Spectacles." He won great praise, too, afterwards in Palmer's Theatre, with his Col. Moberly in "Alabama," and his Col. Carter in "Colonel Carter of Cartersville." In 1895 he scored an emphatic success in "A Social Highwayman." For the last ten or fifteen years he has acted in many different parts in many theatres all over the country, and always with a liberal measure of popular approval.

Music

Berlin heard its six hundredth performance of "Lohengrin" on October 15. The first was given in 1859, the one hundredth in 1876. The only two operas which have exceeded this number of performances in Berlin are Weber's "Freischütz" (693) and Mozart's "Don Juan" (654); but these had many more years to reach those figures.

An interesting Chicago concert, which might profitably be copied in other cities, was given by the Symphony Orchestra there on November 15. The programme was devoted entirely to American music. Three composers, who are members of the National Institute of Arts and Letters—G. W. Chadwick, Edgar Stillman Kelly, and Arthur Foote—conducted compositions of their own. MacDowell was represented by his D minor concerto, played by one of his pupils, Edith Thompson. The concert closed with Stock's "Festival March," into which the "Star-Spangled Banner" is woven. Other numbers were the prelude to the third act of Victor Herbert's "Natoma" and Parker's "Northern Ballad."

A notable event in Philadelphia was the first performance in America of Massenet's opera "Don Quichotte," on November 15, under the direction of Cleofonte Campanini. It met with a favorable reception. According to the *Musical Courier's* representative, "There is every sign throughout 'Don Quichotte' that Massenet felt the thrill of inspiration while writing it, and penned his measures with no lack of the melodic fertility, vocal knowledge, and mastery of instrumentation that characterize nearly every opera created by that remarkable musician."

The London Philharmonic opened its 101st season with a novelty—Richard Strauss's "Festival Prelude." The Philharmonic has a subscription amounting to about \$850 a performance. The expenses have in recent years increased 60 per cent., partly because of increased composers' fees, partly because of the need of increasing the number of available plays to 110 from about 75, as in the good old times. Another extra is the cost of providing exotic instruments called for by modern scores. Only seven concerts are given.

Lovers of lyric song will be sorry to hear that Mme. Sembrich has cancelled all her recital and concert engagements for this season. She has moved, on her husband's account, from Lausanne to the milder cli-