SELECTIONS from the MIDSUMMER BOOK SHELF.

BOOK REVIEWS.

THE EDUCATION OF TOMORROW; the Adaptation of School Curricula to an Economic Democracy. By Arland D. Weeks, M. A., professor of education, North Dakota Agricultural College. New York: Sturgis & Walton Company.

TINKERING at education is a general practice. A zealous haphazardry of cutting off here, setting in there, piecing on almost anywhere, is the familiar spectacle of an educator at work. Not frequent enough to give high hope is the man or woman of vision in education, many-sided, constructive, independent, world-minded. Such, however, appears to be the author of this notable study of the education of the immediate future. The book is, without question, headed upon argument and opposition. It is a radical departure, therefore to be suspected. It implies prodigious work of a new order, in place of the beloved routine, therefore to be suspended. One certain protest will declare that the author has tortured facts past use in order to make them tally with a theory, that he has busied himself mightily in the foolish task of crowding a square peg into a round hole, and so on. This may be true. One doubts it. The study looks convincingly like the plainest common sense of the commonest of situations. At all events, it is calculated to stir up and hearten a slack and timid thing. An outline that can only hope to touch the main points of the discussion runs like this: (1) The use of knowledge is to articulate the individual with his environment. (2) Our present environment is, in intent at least, a democracy. Moreover, it is fast becoming a democracy of economic fact, in place of one of political theory. (3) The full content of democracy is equality of all before the law. The complete theory of economics rests upon the fundamentals of production, distribution, consumption. (4) Therefore it follows that education must be adjusted to this economic democracy in order that knowledge may serve its purpose of relating the individual efficiently to his surroundings. This leads, immediately, to a reclassification of knowledge, to grouping it anew, this time around the basic notions of an economic democracy. The principles upon which this reorganization is to be made look out at every point of this study of economic and social environment. They control the making of a tentative course of study calculated to be the chief instrument in this new adjustment of the schools to real life. In this new view the purely traditional falls away from the schools. What remains becomes the subject of a fresh evaluation in the light of the major social and economic relations. The result is rich, not arid, as some may feel that it might be. The author opposes the early vocational work of which so much is now being said. One gathers that the fine adjustments laid down here would set aside the necessity for this early specialization by supplying an efficient hold on all of one's surroundings, and making at the same time an incomparably securer footing on the broad highway of life. This is the main line of the discussion. Contributory lines support this one from many directions. So far as one recalls, this study stands alone as a comprehensive, rational, independent view of education in the midst of the realities about it, and in fact of its requirements. It is, moreover, a survey supported by enough of practical direction and stimulating suggestion to warrant a venture in the business of thus giving point, vitality, direction and efficiency to the enormous and enormously costly enterprise of public education.

THE ABYSMAL BRUTE. By Jack London, author of "The Call of the Wild," etc. New York: The Century Company.

Young Pat Glendon, son of old Pat, erstwhile prize fighter of renown, is the "abysmal brute" of this truly Londonesque tale. Young Pat is a fighter, too, a prodigious fellow, with muscles of steel wrapped in a silken white skin. A primitive giant, reared and trained by old Pat in the wilds of northern California, a marvel in the science of clean fistic exploit, a baby to the tricks of the ring. This is a story of the prize ring, a succession of fights in which young Pat played with all antagonists like lion with mouse, in a sort of subconscious mastery of the full form and substance of the pugilistic game. Such as have still lingering in the blood a warmth toward the primal way of determining which is the better man by setting the two up each against the other and making the outcome a matter of fists and wind will call this a real story, with brawn and muscle to it. It has these, too. On the other hand, such as have neither experience nor language to guide them through the real business in hand are not completely robbed of enjoyment. Young Pat is a wonder of animal perfection. Nor is this all. A prize fighter who in the betweenwhiles of the game plies a camera, reads Browning and courts a young newspaper interviewer in as customless a way as Eden itself could picture is not without interest to one who has traveled along some distance ahead of the sporting pleasure of the prize ring. One stamp of Mr. London's handicraft is that he makes better fights than he does women. One always feels that he throws the latter in as a sop to the women who may chance to come upon one of his adventures. This is a good story—a good London story.

THE OLD ADAM: a Story of Adventure. By Arnold Bennett, author of "The Old Wives' Tale," etc. New York: George H. Doran Company.

It is easily imaginable that "The Old Adam" is a direct aftermath of Mr. Bennett's recent visit to the United States. Proceeding homeward, surcharged with a host of new impressions and seeking instinctively, writer-fashion, to embody these, what more natural than that this author should draw off from this store such qualities as are needed to make this American-like Englishman this double transcript of the "old Adam." At the sobering age of forty, the hero of this vivacious tale breaks out in a wholly new and sensationally successful career as a wizard of the playhouse. He waves his hand, and in the heart of London the foundation of a church building shifts easily into that of a new theater. He revives dead plays, and produces record breakers out of stuff in which no other play-man can discern a tuppence of promise. He smashes dramatic conditions and precedents, and sets up new standards as he comets back and forth between England and America. In short Edward Henry Machin, alderman of Five Towns, is a wonder, far surpassing the nine-day variety of this particular emotion. A wife of unbelievably heavenly quality, a complex of faith, hope and charity, with Penelope thrown in for patience, further exalts the powers and capabilities of Machin—rather than of herself—as proper wives are wont to do. A near view of the old Adam inside the man himself, under the vicissitudes and blandishments incident to his particular calling, bear full evidence to the close accuracy of Mr. Bennett's study of his own kind. An interesting and amusing adventure, whose laughter comes in largest part from the photographic tally that takes place between this particular "old Adam" and the rest of us.

THE SOLDIER FROM VIRGINIA. By Marjorie Bowen, author of "The Viper of Milan," etc. Illustrated. New York: D. Appleton & Co.

In "The Soldier from Virginia" Miss Bowen has made an animate, a vivid and an immediate matter of the romance of George Washington and Martha Custis. History, in its pains to establish Washington as an example to oncoming generations, has tremendously exalted him as patriot, soldier, statesman, President, neglecting him pretty much altogether as plain man. So, it comes pleasantly that Miss Bowen sets him out here in the universal and supreme adventure of love-making and mate-taking. It is a very stately eighteenth century courtship, salaam and obeisance and formal phrase abounding. It serves delightfully, however, to show George Washington riding the crest or plowing the trough of waves made wholly of hope and despair as lovers have done time out of mind. The story opens with young Washington's mission from Gov. Dinwiddie to Duquesne in protest against the French trespass on English soil. It goes on through the French and Indian war, up to Yorktown and the close of the revolution. These military events form only a distant background for the more buoyant business of love. Fine pictures of the leisured social life of the great landholder of the south in colonial days are set with fidelity and charm. The story itself is interesting, consistent, believable. Miss Bowen has adopted history, more particularly the eighteenth century period, as the medium in which to develop romance. Already a number of well projected, interesting novels drawn off from conspicuous events and influences of history bear witness to the good judgment of this choice. "The Soldier from Virginia" in its general appeal to theme, in the quality of its characters and in the fine consistency of its workmanship stands easily among the best of these.

THE BATTLE OF GETTYSBURG. By Jesse Bowman Young, an officer in the campaign. With maps, plans and illustrations. New York: Harper & Bros.

In a book of more than 450 pages Mr. Young has presented a comprehensive narrative of the Gettysburg campaign which has many merits and few faults. Though he was an officer in the campaign, his story of the great battle, the semi-centenary of which is about to be celebrated, is not based upon his observation, but upon the reports of commanders, letters, notes and autobiographies of participants, much valuable fugitive matter gained from many sources, sifted and brought together to be woven into a coherent account. It is evident to any one who has read much about the Gettysburg fights that it is only by much piecing together of many stories that the true narrative of the battle can be learned. As a rule Mr. Young has done his work skillfully. There are a few cases of carelessness, due, perhaps, to the author's own hazy conception of the facts, but for the most part care and scholarship has been demonstrated. The book is not the last word in military criticism of the battle. In fact, its military judgments seem rather weak. But laying aside comment and speculation of the professional character, it is a book that will give much information to one only partially informed on the contests near Gettysburg and will present to the uninformed a fair and intelligent picture. The book is divided into three parts—a preliminary survey, the narrative of the battle and a discussion of the opposing armies, en masse and in detail. This last subdivision sketches the West Point graduates in the two armies, gives the roster of the Army of the Potomac and of that of Northern Virginia, describes the representation of the states in the forces that fought at Gettysburg and details the itinerary of the Army of the Potomac from June 25 to July 2, 1863. There are many personal sketches throughout the work describing the careers not only of all the general officers in both armies, including colonels commanding brigades, but many other officers whose later history indicates them as worthy of special mention. The death list of officers on both sides is as complete as careful research can make it. Incidents of extraordinary valor hitherto hidden in the pages of government reports or in regimental records have been brought to light and put in form where they can obtain the appreciation which is their due.

Maps explain the text adequately and are conveniently placed. A number of battle pictures drawn in war time are reproduced and serve to show what was the current popular idea regarding military activities even if they do not realize the military man's view of actual conditions. Unfortunately there were no Detailles or De Neuvilles with the Army of the Potomac.

The author apparently has read scores of books dealing with Gettysburg, and he has sought to bring to the reader the cream of his research. The result is a work that may be regarded as an authority. It will be found to be a handy companion in a tour of the battlefield.

POLLY OF LADY GAY COTTAGE. By Emma C. Dowd. With illustrations. Boston: Houghton Mifflin Company.

This is another pleasant chronicle of Polly's childhood, which will appeal especially to young readers who are familiar with the author's previous story, "Polly of the Hospital Staff." The small heroine's generous affection for her playmates, her devotion to her adopted parents, and her clever little ways of creating happiness for everybody are described attractively, and to the interest of the text is added several prettily colored pictures.

CHANGING RUSSIA. By Stephen Graham. With fifteen illustrations and a map. New York: John Lane Company.

Premising the why of England's interest in Russia, the author, himself an Englishman, gives, among other causes: "We think Russia is the new America, which we propose to develop with our capital—becoming millionaires thereby." With naive frankness, he admits that this perhaps is the most important reason of all. The book records "a tramp along the way where the new Black Sea railway is to be built, of a vagabondage in the Urals and a walk in the Crimea." It was a journey that entailed many nights in the open and tea-makings anywhere along the roadside; two incidentals which give to the book a vigorous freshness that belongs only to the great outdoors. Every sort of shelter, hut, monastery, private residence, hotel and government institution, was visited by the wanderer; ever scenic beauty pictured, and every phase of native, from citizen to tribesman, interviewed to get at the way the people of Russia are accepting Russia's change. A number of excellent illustrations have for their chief human interest a pencil portrait of the author drawn by Vernon Hill.

UNIVERSITY AND HISTORICAL ADDRESSES; Delivered During a Residence in the United States as Ambassador of Great Britain. By James Bryce, author of "Bryce's Commonwealth," etc. New York: The Macmillan Company.

Wide interests, under a wide range of reflection and opinion, gather in this volume of addresses. History, art, literature, legislation, education—its means, meanings and mission—and personal sketches of one and another great American are among these themes. Quite apart from the accepted learning of their content and the finish of their presentment one likes immensely the personal note of these addresses, their informality and the warmth of feeling toward the United States, its people and institutions and purposes, that these so unfailingly betray. It is this quality that constitutes the volume an invaluable addition to the more formal writings of this distinguished writer. The book is, appropriately, dedicated to "Elihu Root, in admiration and friendship."

THE MASKED WAR; the Story of a Peril That Threatened the United States by the Man Who Uncovered the Dynamite Conspirators and Sent Them to Jail. By William J. Burns. New York: George H. Doran Company.

W. J. Burns is not like the usual detective, who makes a great mystery of his methods and remains profoundly silent when he has stalked his prey and scored his triumph. Mr. Burns likes to take the public into his confidence, else such a tremendously interesting and important narrative as that which he now offers would not be forthcoming. This is the detective's own account of the uncovering of the great dynamite labor conspiracy which culminated in the destruction of the Los Angeles Times building. Prior to that tragedy Burns had been called in by a large steel-erecting concern to investigate the dynamiting of a railroad bridge at Indiana Harbor, Ind., and later another at Peoria, Ill. From his investigation of these cases came no direct clue to the perpetrator of the outrages, but certain minor items were uncovered, notably a clockwork bomb that had failed to explode at Peoria. The steel structural explosions remained a mystery until after the trailing of the suspects in the Los Angeles Times affair, when it was found that the same agency was responsible for all these outrages. The identification of the steel structural and the Los Angeles explosions came through this bomb, a similar machine having been found unexploded at Los Angeles. In the chapters of "The Masked War" Mr. Burns tells, at times through the medium of the reports of his operatives, how he trailed the suspects. First he found where they had secured their explosive for the Los Angeles outrage and obtained a description of the men involved in that purchase. For months his men were on the trails of suspects. One of them lived for a long time in a colony of anarchists in the state of Washington looking for a man named Caplan, who was known to have been in the group of dynamite buyers, but who was never found. Then later one of the operatives went up into Wisconsin in the winter on a hunting trip in order to be near three men, one of whom was believed to be the Los Angeles dynamiter and the other the agent of destruction in numerous structural steel affairs. Back and forth, up and down, here and there, these men were trailed and finally the proof against them was sufficient for their arrest, followed quickly by the arrest of the chief conspirator at Indianapolis, an official of the labor union.

It is evident from these chapters that the case against the McNamara brothers at Los Angeles was too strong for resistance and their confession was undoubtedly their wisest course. But this book does not so much deal with the proof of the case as with an exposition of the methods employed. Infinite patience, sagacity, precaution, intuition, practical knowledge of the everyday facts of life and business, these are all necessary in a quest of this kind. Mr. Burns tells the story earnestly, at times eloquently. He declares that he has been engaged in this as in a warfare for society, to prevent the destruction of the social order. He calls this "The Masked War" because he avers that it was only part of a general scheme to subvert the government, and indicates that one of its ramifications went to the extent of a proposed attempt upon the Panama canal. However, that may be, this is a remarkable book which will be read with eager interest.

JOURNAL OF JASPER DANCKAERTS; 1679-1680. Edited by Bartlett Burleigh James, B. D., Ph. D., of the Maryland Historical Society, and J. Franklin Jameson, Ph. D., LL. D., director of the department of historical research in the Carnegie Institution of Washington. New York: Charles Scribner's Sons. Washington: Brentano's.

Jasper Danckaerts' journal was intended primarily to give an account of his mission to America to seek a suitable place to establish a religious community, one of the Labadist persuasion. An open-eyed man and an assiduous note-taker, Danckaerts' journal expanded far beyond the requirements of his particular mission, and gathered up an enormous medley of impressions on all sorts of subjects. So the volume has a double value. It serves, first, to throw light on an obscure chapter of the history of Maryland, where this first communal sect of America was established. Again, it gives much that is informing and suggestive upon the beginnings of the middle group of states with facts of importance in connection with Boston and Massachusetts as well. A student of the social conditions of this early period will find Danckaerts' record of inestimable value, a varied, rich, rambling, lifelike picture taken at first hand from the incidents and scenes passing under the eyes of this observing and communicative traveler. To the general reader of history, too, these original narratives of early American history offer an absorbing study, a dramatic interest, that historic matter at second or third hand cannot furnish.

AN UNKNOWN LOVER. By Mrs. George de Horne Vaizey, author of "A Question of Marriage," etc. New York: G. P. Putnam's Sons.

The people of this novel are, quite in and of themselves, the making of it. An attractive group, with no graver design than to be altogether pleasing and equal to such situations as are put up to them to sustain. In substance this is a double romance, four more or less youthful persons separating neatly, after much interesting to-do, into two pairs. The usual requirements of fair and foul weather in this particular kind of enterprise take on decided freshness here through the author's happy faculty of making familiar things look like new, and commonplace ones like those of extraordinary feature. An acquaintance and courtship by correspondence on the one hand and, on the other, a situation wherein the wooing falls entirely to the young woman in the case, divide the interests here so equally that one regrets leaving either pair to follow the like absorbing matters of the other one. A good story, content apparently to be such, with no evidence of any leaning toward laborious character analysis or vexatious social problems.

IN ANOTHER MOMENT. By Charles Belmont Davis, author of "The Stage Door," etc. Illustrations by Wallace Morgan. Indianapolis: The Bobbs-Merrill Company.

A slack title to cover so compact a story. What it means, if it means anything, is, that in just another moment the wholly disheartened stage girl, who takes the leading part in this drama of New York stage life, would have been gone past rescue. In that case one would have had only another unwelcome view of a thing pretty much as it commonly is. And for this he would have foregone a fine romantic finale wherein a new King Cophetua and the beggar maid delight him with a vision of things as they ought to be. Right up to this point of breaking with the logic of the situation, however, the author holds himself to a capable and painstaking portrayal of what it means for the girl in a minor place in the play to keep body and soul together, and to keep them both in her own possession. Mr. Davis knows the stage world and the behavior of human nature within it. Out of this intimacy he makes a striking and convincing story, a balanced and proportioned one that gives light as well as shadow, and shadow as well as light, to this peculiarly exacting and stressful profession.

MISSIONARY EXPLORERS AMONG THE AMERICAN INDIANS. Edited by Mary Gay Humphreys. Illustrated. New York: Charles Scribner's Sons. Washington: Woodward & Lothrop.

In singling out a half dozen missionaries from the small army of men who carried Christianity to the American Indian, the author touches but lightly a vast field which has been worked by many laborers. It was good work, done well, and the six subjects of her selection served their valiant share. The roll of honor, headed by John Eliot, "Apostle to the Indians," is followed by Samson Occum, "Mohegan"; David Brainerd, "Missionary to the Forests"; Marcus Whitman, "Pathfinder and Patriot"; Stephen Riggs, "Forty Years with the Sioux," and John Lewis Dyer, "Snowshoe Itinerant." To the interest of the text is added a number of reproductions of old portraits and pictures with a frontispiece photograph of Marcus Whitman taken from a statue of him on a building in Philadelphia.

THE PUBLIC LIBRARY.

ECONOMIC, SOCIAL AND BUSINESS TOPICS.

Among the new books at the Public Library are many on various phases of economic and social science and a large number of books on practical business topics.

France and Germany.

Dawson, W. H. Germany at Home. 1908. G47-D325g.
Mason, Mrs. C. A. Spell of France. G39-M386s.
Whitman, Sidney. German Memories. G47-W59g.

Sociology.

Kenngott, G. F. The Record of a City. H844-K394.
Lewis, A. M. An Introduction to Sociology. H-L8571.
Rauschenbusch, Walter. Christianizing the Social Order. H-R197.
Stelzle, Charles. American Social and Religious Conditions. HS3-St36.

Railroad Management.

Cleveland, F. A., and Powell, F. W. Railroad Finance. HJR-C597ra.
Eaton, J. S. Handbook of Railroad Expenses. HJR-Ea6h.
Royal Economic Society, London. The State in Relation to Railways. HJR-R818s.
Strombeck, J. F. Freight Classification. HJR-St86f.

Economic and Industrial Topics.

Belloc, Hilaire. Servile State. HC45-B415s.
Dawley, T. R., jr. The Child That Toileth Not. HFM-D325.
Fanning, C. E., comp. Selected Articles on the Conservation of Natural Resources. HE 3-F216. Reference.
Farnam, H. W. The Economic Utilization of History. HC-F232.
Innes, A. D. England's Industrial Development. HC45-In65.
National Conference on the Prevention of Destitution. 2d, London, 1912. Report of the Proceedings of the Unemployment and Industrial Regulation Section. HF-N21.
Toke, L. A. S. L. The Housing Problem. HFZ-T575.
U. S. Corporations Bureau. Report on the Steel Industry. 1911-12. HEI-Un32s.
Walsh, Robert. The Principles of Industrial Economy. HV-W167p.

Philanthropy.

Allen, W. H. Modern Philanthropy. IG-Al53m.
Holmes, Thomas. London's Underworld. 1912. IG45L-H733.
Stewart, W. R. The Philanthropic Work of Josephine Shaw Lowell. 1911. IG-St48p.

Trade Unions.

Brooks, J. G. American Syndicalism. HG-B795.
Bullock, E. D., comp. Selected Articles on Trade Unions. HG-B875t. Reference.
Clifford, Eugene, comp. Union Label Laws. 1911. HG-C614u.

Business Principles.

Eddy, A. J. New Competition. HKL-Ed2n.
Jones, E. D. Business Administration. HK-1J713.
Marden, O. S. The Exceptional Employe. HKE-M33e.
Marden, O. S. The Progressive Business Man. HKE-M33p.
Rose, W. G. Success in Business. HKE-R72s.
Stockwell, H. G. Essential Elements of Business Character. 1911. HK-18t6.

Advertising.

Boulder, pseud. Hidden Causes of Reckless Advertising Waste. HKA-B665h.
Chaney, A. G. Advertising Construction. HKA-C365.
Chasnoff, J. E. Selling Newspaper Space. HKA-C387.
Cherington, P. T. Advertising as a Business Force. HKA-C427.
Freeman, W. C. One Hundred Advertising Talks. HKA-F875o.
International Correspondence Schools, Scranton, Pa. Window Trimmer's Handbook. HKA-In83w.

Salesmanship.

Bean, B. C. How to Persuade and Convince. HKF-B376h.
Collins, C. A. Productive Sales Methods. HKA-C696p.
How to Talk Business to Win. HKF-H83.
International Correspondence Schools, Scranton, Pa. Salesmen's Handbook. HKF-In83s.
System, the Magazine of Business. The Knack of Selling. HKF-Sy87k.

Bookkeeping and Accounting.

Goodyear, S. H. and L. E. Goodyear's Higher Accounting. 1907. HKB-G64h.
Racine, S. F. Accounting Principles. HKB-R114.
Van Cleve, C. M. Principles of Double-entry Bookkeeping. HKB-V274.

Cost Keeping.

Franklin, B. A. Cost Reports for Executives. HKBC-F854.
Prior, F. S. Cost Keeping. HKBC-P936.

Business Correspondence.

Poole, G. W., and Buzzell, J. J., eds. Letters That Make Good. HKC-P786.
Sayer, W. A. Collecting by Letter. HK-Sa87.
Stowe, A. P., pseud. Making the Letter Pay. HKC-St78m.

Corporations.

Lyon, W. H. Capitalization. HL-L9 6.
National Civic Federation. Department on Regulation of Industrial Corporations. The Trust Problem. HLT-N21.
Stevens, W. S., ed. Industrial Combinations and Trusts. HLT-St48i.
Whitten, R. H. Valuation of Public Service Corporations. HL-W617v.

Banking and Investments.

American Institute of Banking, New York. Study Course. 2 v. HN-Am35s.
Gibson, Thomas. The Elements of Speculation. HKS-G357e.
How to Invest When Prices Are Rising. HWI-H818.
Nelson, S. A., ed. The Bond Buyer's Dictionary. 1907. HR-N334.
Van Antwerp, W. C. Stock Exchange From Within. HR-V263s.

Tariff and Taxation.

Lawson, W. R. Modern Wars and War Taxes. HT-L446m.
Morgan, J. E., comp. Selected Articles on Free Trade and Protection. HV-M822. Reference.
Robbins, E. C., comp. Selected Articles on Reciprocity. HVR-R558r. Reference.

Insurance.

Bays, A. W. The Law of Insurance and the Law of Suretyship. II-B347l.
Bullock, E. D., comp. Selected Articles on Compulsory Insurance. IIS-B875. Reference.
Gibboa, I. G. Medical Benefit. IIS-G35m.
Ryan, G. W. The Merchant's and Manufacturer's Preparation for Fire. IIF-R956m.

Quits at a Hundred.

From the New Orleans Picayune.

An Arkansas woman insists that she is 123 years of age. It is a curious fact that after a woman has passed her one hundredth birthday she ceases to have a false pride about her age.

THE HEAVENS IN JULY THROUGH A TELESCOPE

By PROF. DOOLITTLE
of the University of Pennsylvania.

THE most interesting event of the present month is the entrance of the magnificent planet Jupiter into our evening sky. We see this brilliant object shining out in the southeast immediately after sunset, but unfortunately it remains low in the heavens throughout the entire night, never mounting so high as one-third of the way to the zenith. This is because this world is now at a point in the heavens almost exactly opposite the sun; as the latter body is now at almost its greatest distance above the celestial equator, the great planet is at nearly its lowest position among the stars.

Like the sun, Jupiter is ever moving slowly eastward around the celestial sphere, following very nearly the sun's path, AEB, Figure 1, among the stars, but twelve years are occupied by the planet in making the journey. Jupiter is now at Sagittarius, but when we see it six years from now it will have mounted high above the celestial equator to nearly the position in the heavens occupied by the sun at the time of the longest day. It will then be in the most favorable possible position for observation.

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Next in interest to the return of Jupiter is undoubtedly the appearance of the beautiful constellation of the Scorpion, which, with its brilliant group of stars extending from C to D, Figure 1, and its bright red Antares, at F, now forms a most striking object in the southern heavens. Still nearer the zenith, the Serpent may now be well traced out, a long and winding constellation whose head is just below the Northern Crown and whose tail is found far in the east among the stars which form the beautiful group known as the Eagle. North of the latter group we see the strange little figure known as the Dolphin, or Job's Coffin, while arching directly through the zenith there is a beautiful train composed of the Northern Cross, the Lyre, Hercules, Bootes and the Great Bear, all of which are now in most excellent position for study.

The many faint stars between the Serpent and Hercules form the large Serpent Holder—an elderly man holding the Serpent in his hands, and a most ill-omened constellation in astrology whose stars occasioned death by poisoning, while to the Moors and Turks the group was known as a Stork.

Throughout this whole region of the heavens, which is largely occupied by the wonderful summer branch of the Milky Way, there are innumerable objects of interest for one who possesses a small telescope. For example, in Sagittarius alone he might well, after examining Jupiter, turn to the wonderful star-clusters at H, K and L, each of which is so marvelous a cloud of stars heaped together that it is even visible to the naked eye. And in examining these objects it should not be forgotten that each of the seemingly innumerable stars is a great sun, probably many times as large as our own. At the point M, a little way above the cluster L, there is one of the finest fields of the entire sky for a small telescope. Just above this, at N, there is the faint Horseshoe nebula, and at P there is the wonderful Trifid nebula, a remarkable nebulous cloud which is separated into three distinct parts by black lanes which run through it. Lastly, each of the stars marked S in this constellation will be found to be a double star.

The comet whose discovery was recently announced proved rather a disappointing object, both on account of its small size and on account of its faintness. At no time was it nearly bright enough to be seen without a moderately large telescope, and had its path not happened to pass within sixty-six millions of miles of the earth, which is unusually near, it would probably not have been discovered.

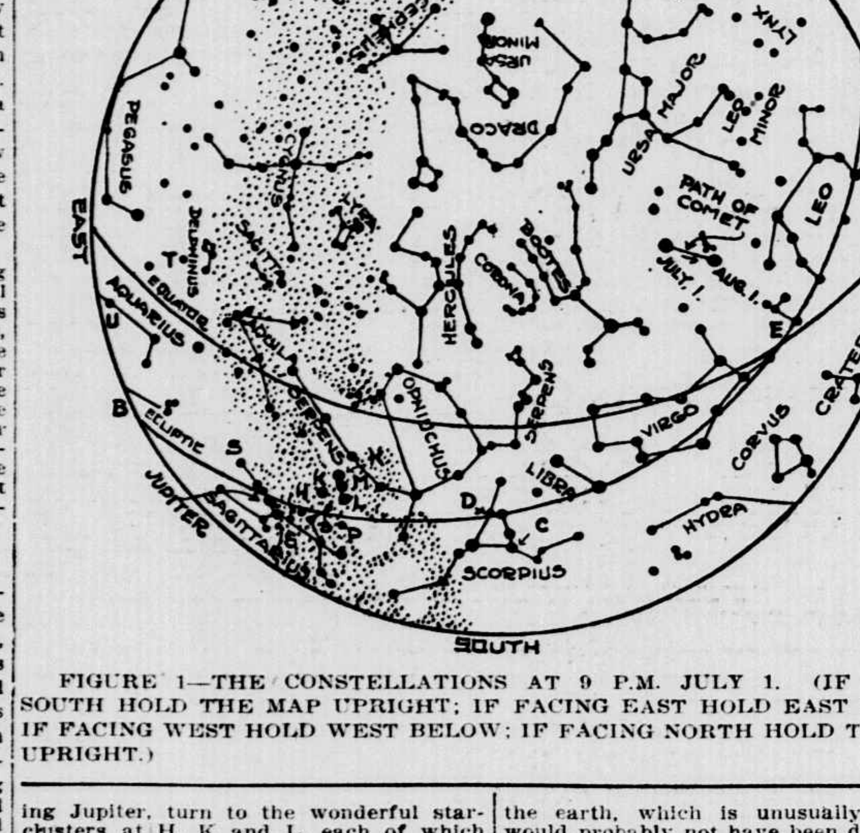

FIGURE 1—THE CONSTELLATIONS AT 9 P.M. JULY 1. (IF FACING SOUTH HOLD THE MAP UPRIGHT; IF FACING EAST HOLD EAST BELOW; IF FACING WEST HOLD WEST BELOW; IF FACING NORTH HOLD THE MAP UPRIGHT.)

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The comets are great nebulous clouds, composed of meteoric matter, gases meteoric dust and matter in a radiant condition which, as they drift through the depths of space, begin to feel the pull of our sun and to fall toward that body. But the chance that one of them will begin its motion in such a way as to hit the moving sun, or to even pass very near it, is exceedingly small. Each comet as it draws nearer to the sun will move ever more and more swiftly, and will finally swing around that body and draw away from us through a very different region of space from that through which it formerly moved. There must be immense numbers of these bodies whose paths are thus completely changed by their passage around the sun, but which even when nearest the sun are so far away from the earth that we do not detect them. It is only when a comet has drawn comparatively near the sun that forces of a gravitational and electrical nature so agitate its great mass that it becomes very bright. It is at this time that the sun drives a part of its material away and thus forms the tail. As the comet recedes from the sun, its tail disappears and the whole mass grows fainter and fainter until it finally becomes lost to us.

* * *

The present comet was discovered at the point T, figure 1, just below the constellation of the Dolphin. It was then approaching the earth, its least distance from us being reached about June 1, when it was sixty-six millions of miles away. Its path lay outside of that of the earth, and the comet moved around the sun in an opposite direction from that in which the earth is moving; consequently the two bodies rapidly separated. Their distance apart will increase from 117 millions to 216 millions of miles during the present month, and throughout this time the comet will be so faint that it can only be seen in the largest telescope. The portion of the apparent path pursued throughout July lies in the beautiful little group of stars known as the Maiden's Hair, in the position shown in Figure 1.

Mercury will be seen at its greatest distance east of the sun on the evening of July 7, and for a few evenings before and after this date will shine out almost due west, low down in the sunset glow.

Venus, Mars and Saturn are all near together and conspicuous in the east in the early morning sky, just before sunrise. The first planet will be seen at its greatest distance west of the sun on the morning of July 4, at which time it will rise nearly three hours before sunrise. It will pass below the planet Saturn on the evening of July 21, so that the next morning these two worlds will be seen close together in the sky.

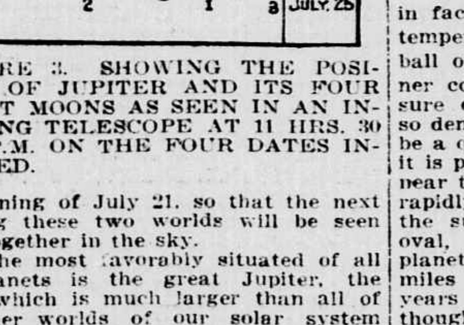

FIGURE 3. SHOWING THE POSITIONS OF JUPITER AND ITS FOUR BRIGHT MOONS AS SEEN IN AN INVERTING TELESCOPE AT 11 HRS. 30 MIN. P.M. ON THE FOUR DATES INDICATED.

But the most favorably situated of all the planets is the great Jupiter, the world which is much larger than all of the other worlds of our solar system taken together. The study of the ever-changing bands and other markings of this beautiful planet is a work of never failing interest. The observer will find that many of the smaller areas are pushing ahead through the great cloud of surface vapors which surrounds them with a speed of many thousands of miles an hour, and that the whole equatorial region of the planet completes its revolution and ends its day in a somewhat shorter time than the regions in higher latitudes.

* * *

Evidently this world is in a very different condition from our own. It is, in fact, believed that it is at so high a temperature that it is nothing but a ball of vapor; that there may be an inner core which under the immense pressure of the overlying material may be so dense as pitch, or even that there may be a quite small core which is solid. And it is probable that the parts of the planet near the center turn about the axis more rapidly than those parts which lie nearer the surface. In the year 1878 a great oval, reddish area appeared on the planet, 30,000 miles long and 7,000 miles wide, which persisted for many years and may even yet be seen. It is thought that the disturbance which produced this strange marking lay very deep within the body of the planet.

By consulting the American Nautical Almanac, or one of the several smaller almanacs copied from this, it will be seen that many interesting phenomena of the four bright satellites will occur during this month. For example, July 29 the inner moon will move onto the edge of the planet at 10 hours 47 minutes p.m., and the fourth moon will pass behind the planet at sixteen minutes past midnight. At this time but two bright moons will be visible, both to the left of the disc. The first moon will move off the edge at five minutes past 1 o'clock, its intensely black shadow both entering and leaving the disc thirty-five minutes later than the moon itself.

From the 28th to the 30th of the month bright, slow-moving shooting stars may be seen to dart outward in all directions from a certain point in the constellation Aquarius, fifteen degrees to the left of the star U, figure 1. Although at 9 o'clock on this date this region has risen, it is still low in the heavens and the shower is best observed at a later hour. It will doubtless be most noticeable from about 11 o'clock in the evening until 3 o'clock of the following morning.

July 3 our earth will have reached its greatest distance from the sun. It will then be 3,200,000 miles farther away than at the time of its nearest approach, six months ago.

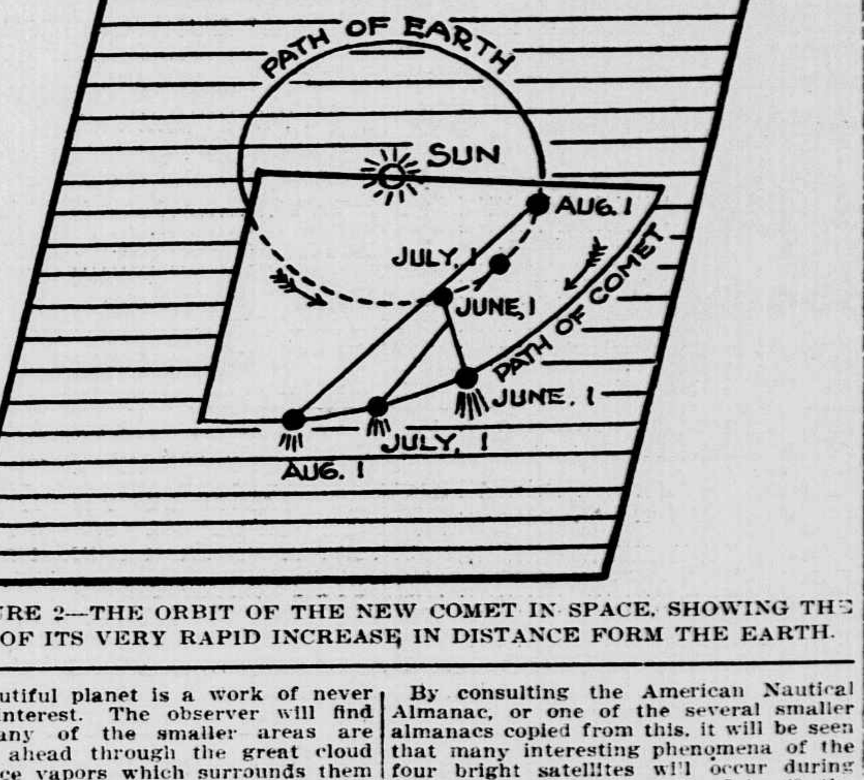

FIGURE 2—THE ORBIT OF THE NEW COMET IN SPACE, SHOWING THE CAUSE OF ITS VERY RAPID INCREASE IN DISTANCE FORM THE EARTH.

OLD WASHINGTON.

THE TYPOS OF 1820-30.

By James Croggon.

The printing business was looking up in Washington by 1820, and there were a few hundred connected with the newspapers of that day and employed in the few job offices. There were being published at the time the National Messenger and the Metropolitan in Georgetown, but the former soon ceased publication. In Washington the Expositor had passed two years of life and the National Register, published by J. K. Meade, the firm supporter of the Monroe administration, ceased to exist. The Intelligencer's proprietors, Gales & Seaton, having been chosen congressional printers, their office boomed and it became one of the most prominent points in the city, the gathering place for government officials, members of Congress and also a great literary center.

The National Republican was established a short time thereafter at the corner of Pennsylvania avenue and 22d street. The Columbian Star was being published by Anderson & Meehan at the corner of 10th and E streets, and the Washington City Gazette, published by Jonathan Elliott, had a short time before moved its office to the Elliott building, on the north side of the Avenue east of 4½ street. Mr. Duncan was carrying on the printing business on 12th street above E and there were some other small job offices. The office of A. & W. Way, on 9th street between the Avenue and G street, had become that of Way & Gideon.

The original scale of prices, $10 per week during the session of Congress and $9 during the recess, with $2 per day on Sundays, and space work at 28 cents for brevier and 33 1-3 cents for less than brevier per thousand, seemed satisfactory to all. Harmony existed between the bosses and journeymen, and the meetings of the society were held regularly, most of the time in the "long room over the baths" on the north side of C street between 4½ and 6th streets.

Meetings were held also in other places, but on the completion of the council chamber in the city hall that became the regular place of meeting.

In 1821 Lambert Tree, who afterward became the chief clerk of the city post office, serving for many years, William H. Blayney, A. J. K. Baker, Thomas L. Wilson and James O'Brien were admitted members. The following year W. F. Pitts, Russell Eaton, F. G. Fish and James Clephane joined the society. In 1823, M Sweeney, William Faithful, Thomas Herty, J. C. Smoot, James Paxton, J. R. Cunningham, R. H. Martyr, John Cam, John Stockwell, S. W. Harris, G. T. Judy, A. Rothwell and John Shepherd joined. In 1824, there were admitted to membership M. Atkinson, Jehiel Crossfield, P. Albright, W. Phillips, E. J. Hale, W. S. Allen, W. S. Eskridge, James King and Joseph Costigan; and in 1825, S. C. Eustick, Joseph Bailey, Andrew Crothers, W. T. Wheat, Michael Larner, S. Sherwood, William O'Bryon, R. C. Bonham, C. S. Hurley, J. T. Whitaker, William Rodgers and James Hanley. In 1826, James Thompson, T. Downey, T. K. Collins, R. C. Barrett, John Anderson, Enoch Edmonston, William Walters, E. P. Gaddis, John Dowling, P. G. Collins and Arthur Thompson. In 1827, Henry Walker, J. T. Butler, Henry Barnard, P. Louderbach, M. Wilson, Robert Bell, William Woodward, E. Richardson and Eugene Laporte; and in 1828, A. McKelly, William Wellington, Z. R. Pelee, John Hart, Walter Smith, Jacob Squier, J. W. Woods, C. J. Hamilton, Isaac Watson, T. M. Graham and Lynde Elliott became members. In 1829, the names of Ferdinand Jefferson, A. B. Beckwith, Thomas Frances, Robert R. Houston and David Wilson were added. Mr. Jefferson served many years at the "case" and was translator in the State Department some time.

During this decade a number of other papers than those mentioned were established. Some lived long and others lasted but a few years. In 1826 the United States Telegraph was published by John S. Meehan at the southwest corner of 11th street and Pennsylvania avenue, and a few years after it was removed to the northeast corner of 10th and E streets, when Duff Green of Georgia became the editor and proprietor, and it continued publication until 1837.

* * *

Prior to its removal to this city, John C. Rives, who was afterward connected with the firm of Blair & Rives and published the Congressional Globe, was the clerk and the business manager. Mr. Colvin published the Register in 1827, and the following year the Banner of the Constitution, devoted mainly to free trade, was established here by Acondy Raquet of Philadelphia, and it was printed for a short time, about four years, by William Greer, at the northeast corner of 9th and E streets, in which building nearly forty years before Benj. Moore had published the Washington City Gazette.

In 1828 the Washington City Chronicle was established by Andrew Rothwell and S. E. Ustick, the latter a few years before having conducted a job office on D street, just east of 11th. The first issue of this paper was published in July of that year, and much space was given to the account of turning over the first spadeful of earth by John Quincy Adams which marked the beginning of the Chesapeake and Ohio canal, in Georgetown, the Fourth of July.

* * *

In 1823 the National Journal was established at the southwest corner of Pennsylvania avenue and 11th street by Col. Peter Force, who became noted as compiler of various papers, and who was at one time mayor of Washington and one of our leading public citizens. The editor was Phillip R. Fendal, who was distinguished as a journalist and a lawyer, and at one time served as district attorney. The paper was published for about eight years, during which time it was removed to the site of the old Times building, 10th and D streets, where Mr. Force collected one of the most extensive private libraries in existence.

In this decade F. S. Myer had a job office at 10th street and Pennsylvania avenue, but later in life became a notary public and magistrate.

William Cooper, who at that time resided on 9th street above the Avenue, had his job office on the south side of the Avenue, a few doors west of Mr. Myers, and he later established a bookstore on the north side of the Avenue between 9th and 10th streets. In the latter part of his life, on what was known as the Island, now South Washington, he served as a magistrate.

* * *

Among the members of the society were many who took a prominent place in the community known in every effort to advance the welfare of the District, municipal, fraternal, military, social and religious. James Clephane resided on G street near 13th and worked at the "case" for many years. He was the father of Lewis Clephane, for many years connected with the National Era, and James O. Clephane, one of the leading stenographers during the eventful days of the civil war and subsequently.

Thomas Herty was afterward connected with the municipal government in a clerical capacity. Jehiel Crossfield, after working at the Intelligencer office until old age, entered the employ of the government.

Andrew Carothers became, before his death, one of the leading grocers of the city and was located at the corner of 11th and F streets.

Michael Larner in early days resided near the Intelligencer office, where he was employed, and later removed to the neighborhood of F and 6th streets. He was the father of the late Noble D. Larner, so well known in Masonic and church circles. Mr. Whitaker spent the major part of his life at the Intelligencer office and died at a very old age.

Henry Walker lived to be nearly 100 years of age, dying but a few years ago. During his life he worked in many offices and was a soldier during the Mexican war.

* * *

As at present, the members of the society were eminently of a social and fraternal disposition. During this period they had but little to do other than their daily work. It was their custom to observe the birthday of Benjamin Franklin, the patriot printer of revolutionary times, and seldom was the anniversary of the nation's birth omitted. Franklin's birth was observed by a dinner January 17 or the following Saturday night.

Independence day was celebrated sometimes by a parade, and July 5, 1824, the society met at Kennedy's tavern, then on F street between 13th and 14th, and paraded, having two banners in line as well as a press drawn by four horses, which during the march threw off copies of the Declaration of Independence. They proceeded to the Spring Tavern, near the site of Mount Olivet, where they partook of a dinner.

The Crier at Lloyd's.

From London Opinion.

There is some difficulty in filling the vacancy caused by the retirement of the crier at Lloyd's, who has been pensioned off with £200 a year. The holder of this office must possess a musical voice, for the members hear a good deal of it. During business hours the crier, resplendent in a scarlet gown, stands on a pulpit in the underwriting room. Any caller wishing to see a member gives his name to an attendant outside this room, which is strictly reserved for members. The message is delivered to the crier, who delivers it from the pulpit. A more pleasing duty is the notification of the safe arrival of a vessel on the "overdue list." This he prefaces by a peal on the "big bell," which used to belong to the Lutine, and formed part of the salvage recovered from that ill-fated vessel in 1849.

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