No. 1529 New Series. Vol XXX. No. 9. THURSDAY, DEC. 29, 1921. [Registered at G.P.O.] SEVENPENCE

CONTENTS.

PAGE	PAG
Notes of the Week	THE NEBULAR ORIGIN OF LIFE—II. By Allen
CURRENT ECONOMICS. By J. W. Gibbon 99	Upward
Our Generation. By Edward Moore 100	VIEWS AND REVIEWS: Human Progress—I. By
CLAUDE FARRERE. By Pierre Robert 101	A. E. R
READERS AND WRITERS. By Herbert Read 103	REVIEWS: Beauty and the Beast. Conquest.
Drama: Will Shakespeare. By John Francis	From Newton to Einstein. Winsome Winnie 108
Норе	LETTER TO THE EDITOR from H. Belloc 108

NOTES OF THE WEEK.

THE performance at Washington has not been running quite so smoothly during the past week; it has been spoilt by a recrudescence of fluffing and gagging on the part of some of the company. The principal offender has again been France. She has adopted Japanese tactics by putting forward not-quite-officially, through the mouth of an admiral, a really extravagant demand for battleships and instantly repudiating it officially. This is a curious method of bargaining, but it seems to have become the recognised procedure of modern diplomacy. It is understood that the price for which France is really standing out in her latest Dutch auction is a libertine's charter in regard to submarine construction. On the other hand, our representatives are proposing the total abolition of submarines. But as it is openly announced beforehand that they do not expect any of the other nations to assent, this too is evidently only a subtle piece of "demonstration." The net result of all this bluff and counter-bluff is that, on the score of submarines, a further big inroad will be made on the expected economies for which the taxpayer's mouth was so thirstily watering. But whatever the exact figures at which the naval establishments are finally adjusted, the fixing of them will be part of an all-round agreement as to immediate causes of dispute. That is a step gained. It at least gives the world breathing space in which to turn round and bethink itself as to the deeper causes of war. Even a temporary and superficial pacification of the world is a gain, when the whole fortunes of civilisation are hanging in the balance. The removal of any irritant that might precipitate conflict is so much to the good; and even on this ground alone we should welcome an assured settlement in Ireland. The omens there are equivocally good. Wittingly or unwittingly Mr. de Valera has reduced to hysteria the opposition to the agreed terms; he has almost gone out of his way to formulate his divergence from Mr. Michael Collins as a mere quibble about words.

German Reparations still loom very large in the European sky. What exactly is going to be done about them remains for the moment obscure. Ger-

*

many has failed to obtain a loan in London; and France seems determined not to hear of any moratorium. There are rumours of a comprehensive scheme of readjustment, in which England will play the part of the altruistic benefactor (of course primarily in her own interests); but the key of the situation lies in the discord of interest between France and ourselves. former really does want the reparations paid. has her devastated regions to restore, and, owing to special national conditions both permanent and postwar, she has comparatively little unemployment. Hence she need not bother about putting a foreign customer out of action. For us, on the contrary, in our island tolly, our foreign customers are all important; a reparation which ruined them would likewise impoverish us. Even apart from that, a large indemnity landing on our shores would be in the nature of a battery of "heavies" trained on the industries which supply our people with the one great need of their lifeemployment. So we hear hints of our cutting down our own claims and even buying off part of France's claims on Germany with the French bonds which we hold. Russia, too, it is reported, is to be brought into the scheme. She is to receive "recognition," in order (it would seem) that she may be exploited by Germany. "Oh! what a tangled web we weave"—when we treat the provision of employment, and not of goods, as the object of industry. Can insanity further go, than a system under which a nation cannot afford to receive a present? What a text for any party standing for a fundamental economic transformation! Yet we turn to the Labour Press, and we find Mr. Brailsford apparently accepting the situation as unquestioningly as any City banker or big manufacturer. He analyses the economic position and the psychology of the various nations admirably. But he seems to see nothing odd in the situation. He endorses, with something like enthusiasm, the "English" point of view, as sketched above. He is only concerned to get in an anti-Coalition dig by blaming the Government for originally running us into the position from which they are now seeking to extricate us. The moral he desires above all to ram home is, "The cure for the pervasive and invisible devastation which has befallen us is-markets." Debts paid in goods, he holds, "may become our ruin."
"These goods, unlike the goods sent out under conditions of normal trade, evoke no demand for goods and services in return." "Pre-war imports from Germany made employment here." Mr. Brailsford drops not a single hint that it is either possible or desirable to

scrap such an economic Mad Hatter's tea-party. He explicitly (and, we are sure, quite justifiably) associates the Labour Party with his own views. That Party is unfortunately divided between the sectional wage-grabbers of the Trade Unions and the Brailsfords and Angells, the height of whose ambition is to out-Liberal the Wee Liberals.

The civilised world will really have before long to settle this question of the true place and importance of "employment" in life; or the question will "settle" civilisation. Our society cannot receive a gift without ruining itself—that is the long and short of the whole Reparations muddle. There is nothing peculiarly insidious about the character of Reparation payments as such; what applies to them applies to any gift. Very well, every increment of our productivity through the advance of invention is equally a gift. If we do not know what to do with an indemnity, we equally little know what to do with the munificence of inventors. We have repeatedly formulated the issue, what is to happen if Professor Soddy and his collaborators succeed in harnessing, for industrial purposes, the internal energy of the atoms? But, indeed, there is no need to wait for any such hypothetical contingency. existing potentialities of production are enough to swamp us with "unconsumable" wealth. Mr. Henry Ford has already been working astounding miracles on an experimental scale. He is farming 5,000 acres with 20 days' work in a year. He is now arranging to take over Marsh Shoal, Alabama, from the Government in order to work it for the production of nitrates as agricultural fertilisers. He is also designing vast experiments in the use of hydro-electric power for transport and industry. And all the time people, in America as well as here, anxiously discuss how we are to support our huge modern populations, as though there were some stupendous difficulty about producing the wealth we need. They talk (especially in this country) of "over-population." They really believe that we, and the other great nations, are poverty-stricken; when industrial magnates, like Sir Raymond Dennis, cannot help occasionally letting the cat out of the bag, and (perhaps unconsciously) confessing that the trouble is that we are too rich. Surely the thing cannot go on much longer. A day must come, when the peoples will take a leaf out of the book of the prisoner in Mark Twain's story. For sixteen years he had languished in a loathsome dungeon. Then one day a bright idea struck him-he opened the door and walked out.

* * *

The real constructors of the future at present are the Henry Fords-the few captains of industry who are genuinely driven by an impulse to create things rather than to make profits. They will prove to have contributed more than anyone else to the practical develop-ments of our time. Socialists and Trade Unionists, et id genus omne, are indefatigable gas-workers; but that is pretty well the extent of their achievement. aristocrats (such as still survive of the genuine article) divide their time between literary and artistic dilettantism and playing at politics. The financiers, it is true, have to be taken very seriously; at present they are our real rulers. But they do little else but mark time, and pile up senseless fortunes. The constructive forces are wielded by the Henry Fords. It may not prove long before they find ways to overturn the thrones of the money-changers. It would be strange, after all the hyysterical denunciation by the Socialist movement of "the capitalist," if the Socialists should be left stranded on a sandbank of whirling words and barren dreams, and the more imaginative of the industrial capitalists should in the end prove the people to inaugurate that new social order, the alternative to which is collapse and ruin. No doubt the ideals of such men want much supplementing and some correcting. They are apt to take an ideally mechanical view of life. But perhaps their worst defect is an extreme fondness for bossing people for their own good. We disapprove of all despots, however benevolent. But if the people who know that they are able to do things are left, by the windbags and the academic dreamers, the whole task of saving society, it is only natural that they should become despots out of benevolence. No one has any right to blame them, and certainly the man in the street has no cause to complain. Whatever his fate, it will have been brought on him by his own indolence and apathy. Yet, after all, the actual makers of history nearly always build better than they know. If anyone can If anyone can overthrow for us the sinister power of financiers, then, whatever his personal ideals for society, he will needs lay a foundation, on which the ordinary man is likely in the end to achieve real emancipation and become as much the master of his destiny as his will allows.

Mr. Asquith is a little troubled about the great Economy campaign. He is anxious to make the best of both worlds. He sees that there is political capital in this cry. Perish the thought that his Party should not get a good scoop out of this! "The Independent Liberals," he boasted in a recent speech, "had preached the necessity of cutting down expenditure." Ah! yes, but then the great Liberal Party is the friend of the working class, the party of "social reform," the fearless champion of "equality of opportunity." What about education? Yes, we must take care. So Mr. Asquith elaborately explains that, though he and his friends said "necessity of cutting down expenditure," they never, never said "root and branch cutting down of expenditure." With that "he had no sympathy whatever." Greatly daring, he even declared that "the anti-waste campaign was ridiculous." What was needed was "discrimination." He was afraid of "wholesale reduction," leading "in a few years to the starving of services which were really essential to the national life and health." And if it comes to that, who will be more responsible than the Liberals who talked so glibly of "cutting down expenditure"? Was every one of them always scrupulous in qualifying his advice with the careful safeguards on which Mr. Asquith now lays such stress? Anyhow, they talked, and Mr. Asquith still talks, of our being a "poor nation"; they insist that we "cannot afford" this, that, and the other. If our political guides talk like that, the people will draw their own inferences. Mr. Asquith laments the present attack on education, and protests his innocence; we seem to remember that Henry II said much the same about the murder of St. Thomas of Canterbury. true, and the only effective, answer to the "anti-waste" wastrels is that we are an incredibly rich nation and can afford to spend richly on every desirable amenity of the national life. Not that we defend real waste; and there is plenty of this in our present administration. There are many things that should be scrapped wholesale, provided always that this is done as an integral part of a programme of positive reconstruction. But these merely negative reforms by themselves are infinitely worse than useless. Even an unnecessary or overstaffed department is at any rate a convenient agency for distributing purchasing power. Till one has provided some more desirable method of issuing an equivalent amount of income, it is madness to cut off this source of effective demand. The need is for consumers who can afford to buy. Without these, no encouragement to the producers can do any good. The "Times" is merely a blind misleader of the blind, when it suggests that a reduction of taxation will directly and automatically stimulate a revival of trade.

The "Labour Monthly" has printed a full report of one of M. Lenin's latest pronouncements on the Soviet Government's "New Economic Policy." It cannot be

very cheerful reading for Communists. He honestly admits that the retirement to "prepared positions" "has been accompanied by a considerable and even an excessive degree of disorder." He makes no attempt to conceal or minimise the almost desperate problems with which the Bolshevist regime is faced. apparently laments the fact that owing to the destruction of large-scale industry the proletariat has been "declassed" and seems prepared to rejoice over a revival of capitalism, because it will recreate the proletariat which alone can ultimately establish Communism. It is a dreary tramp round and round the mulberry bush that he offers us. First, you have a revolution, which wipes out capitalism and therewith the indispensable revolutionary instrument; then you recall capitalism in order to restore your cherished idol, "the proletariat," so that it may, by and by, carry out another revolution. How often is the process to be repeated? This is the sort of fatalistic nightmare which economic determinists are driven into dreaming. M. Lenin advocates a madrush into the industrialisation of everything. Foreign capitalists, he admits, "will wrest from us hundreds per cent. of profit." No matter; "let them flourish," he exclaims. "We" shall learn from them how to do things, and "then we shall be able to construct our Community Republic." So our own Marximum have sentent in the struct our community results. ians have repeatedly assured us that the trusts are doing the Socialists' work for them. It sounds very easy; but unfortunately things do not work out that way. Just so far as capitalist industrialism carries on successfully, the workers get used to it and its power becomes more and more consolidated. It is likely to perpetuate itself, until its inherent irrationality has brought it to an absolute deadlock; and then its wageslaves will be in the last state of mind in which they would be likely to exhibit the enterprise and adaptability to found a new social order on the spur of the moment. The only accomplishment of the Russian Revolution is likely to prove to have speeded up by decades the industrialisation of the country and to have intensified capitalist exploitation to a pitch which it might otherwise never have reached in any country. In the end the system will be faced by the same alternative of breakdown or radical transformation which will confront it in every nation. The question will have to be answered under just the same conditions as elsewhere. The Bolshevist episode will have thrown no light (except a red light) on its solution.

There are millions of persons, at home and abroad, whom it would be a mockery to wish a happy New Year, and the comfortable ought not to be happy, unless they find their happiness in a strenuous and intellectually sincere crusade for a better world. It is indeed a gloomy year's end-some two million unemployed in our midst, America and other industrial nations at least as badly off, most of Europe on the verge of chaos, wholesale starvation devastating a large area of Russia, a world conflagration scarcely restrained from breaking out, and certain to break out before many years are over, unless the nations drastically mend their ways. In the face of it all, millions of people remain utterly thoughtless and find the football news the most thrilling portion of the daily paper. Of the more serious, there are three classes; and the two larger of these are not very helpful. They may be described as advisers, devisers, and previsers. The first are those who are continually pumping moral advice all over us. They include most bishops and one or two very popular workers among the Church Socialists. The second class, embracing front-bench politicians and Labour leaders, are for ever trying to patch things up by isolated ad hoc devices. The previsers—and there are none too many of them—strike down through the superficial appearances into the hidden roots of social phenomena, and from that standpoint seek both to forecast and to forestall the future.

Current Economics.

In the course of the original propaganda of National Guilds THE NEW AGE rightly stressed the fact that the proposals were in the direct line of English tradition, for they sought to revive and embody the high ideals of the craftsman at his best. So in the propaganda of the Douglas Scheme inspiration is again to be derived from a sound mediæval tradition, that of the Just Price. This tradition, as has been observed previously, was propounded by the Church as a counterblast to the doctrines of the Roman law which were being insidiously adopted in civil jurisprudence. Senor de Maeztu in his review in these columns of Mr. Penty's "A Guildsmen's Interpretation of History" has already dealt with the conflicting principles of Canon Law and Roman law; and there is no need to re-traverse the ground. Suffice it to say that the fundamental design of Roman law was the conservation of individual rights in property. When this basic principle was amplified for application to trading, the jurists held it to be permissible for one party to overreach the other, for the trader to buy as cheaply and sell as dearly as possible. Professor Ashley in his "Economic History" points out that the only qualification of this principle ever enunciated aimed at the protection of the seller. The consumer, as now, must have been an entirely subsidiary consideration. These implications were stoutly contested by the Canonists to some effect, for Lipson says: "To the mediæval mind it was intolerable that dealers and middlemen should manipulate supplies with the avowed object of forcing up prices." Market rigging was looked on with disfavour by the Church, which did not hesitate to apply its ethical principles to economic relationships. The Church teachings had direct effects, for Parliament, municipality, and Guild endeavoured to achieve in practice the ethical concept enunciated by the ecclesiastics.

Ashley traces the first reference to a "Just Price" to St. Augustine of Hippo, who gives as an example the case of a man selling a manuscript, and ignorant of its value. The buyer gave him the Just Price though he was not expecting it. The doctrine of St. Augustine was elaborated by later Church jurists, and Ashley mentions in particular St. Thomas Aquinas, who in his theological encyclopædia treated of the principles that should apply to men in their relations as buyer and seller. According to Ashley the main conclusions of Aquinas were "that prices . . . should not vary with momentary supply and demand, with individual caprice, or skill in the chaffering of the market"; and that "all merely speculative trading, all attempt to make gain by a skilful use of market changes," is to be condemned.

The mediæval offences punished by the magistrates that violated the foregoing principles were the practices of engrossing, forestalling, and regrating. Engrossing was to purchase crops while growing, or before being winnowed, and to withhold them from sale until a better price could be secured. Forestalling was to purchase commodities on their way to market. In this way the buyer obtained goods at a price not determined by the interplay of full supply and effective demand at the market. Moreover, the market dues or tolls were also evaded, thus affecting the revenue of the municipality that provided facilities for holding the market. Regrating was to buy goods at a market and re-sell them at the same market at a higher price.

These practices aimed at securing a bargain either on one side or the other that was not equitable, or socially just. Their effect was to enable the final vendor to extract more than his appropriate share, and to deprive the consumer of his due measure, of social credit, for the manipulation of supplies was disastrous in a community where only a limited area was available to draw upon for those supplies.

Consider the modern implications of the mediæval conception of the Just Price. By manipulation of financial credit, which would be impossible in the absence of

real credit of communal origin, financiers accomplish on the grand scale what the mediæval engrossers, forestallers, and regrators compassed at local markets. Moreover the operations of finance in relation to prices and social credit are disguised in a way impossible to the traders of the thirteenth and fourteenth centuries. The financial oligarchy need not show its hand by interfering with material supplies: it can find any number of plausible reasons for creating or cancelling credit, as the occasion suggests, and no man can point to the forcible detention of goods.

At the old-time market, seller and buyer, producer and consumer, confronted each other in person. Manifestly this is impossible under modern conditions; and aforetime opposition to engrossers, or wholesale merchants, would be a futile anachronism. Industrial development has enlarged the area of supply and distribution. The inevitable incursion of finance has complicated the problem; but that the problem, even in its most complex terms, is capable of solution has been adequately demonstrated by Mr. Douglas.

But what of the Church? Is she now oblivious to

But what of the Church? Is she now oblivious to the causes of the economic miseries of her children? Has she no ethical principles to apply to modern conceptions of commercial morality? Alas, where her early teachers found the minnow stick in their gullets, their successors find no difficulty in swallowing the whale, nor do they cry for copious draughts to wash it down.

J. W. Gibbon.

Our Generation.

It is the characteristic of all unqualified supporters of our present financial and economic system, and especially perhaps of those whose allegiance is conditioned by humanitarianism, that the things which they say in seriousness have the appearance of being said in irony. So complete and typical an illustration of this appeared some time ago in the "Journal of Industrial Welfare" that one has only to quote a few passages and to annotate them between the lines to define whole section of public opinion. The document in question is the report of a speech by Dr. Macfie Campbell in which in the most humane manner a dozen of amazingly insensitive assumptions are made. doctor commences promisingly by admitting that "joy in work, which belongs to the skilled craftsman or the professional worker, is a luxury which many other workers do not have. The nature of [their] work may be such that there is little possibility in it of giving satisfaction to anyone with average aspirations." being so, how are we to make the best of things? Dr. Macfie Campbell replies "The possibility of satisfaction after work depends, first, upon absence of excessive fatigue; secondly, upon certain economic conditions; thirdly, upon decent opportunities in the environment for recreation; fourthly, upon having had the training that enables one to utilise the means of satisfaction available in the environment." Now with all that is said here no one would disagree; absence of fatigue, 'good money," recreation and culture, are all things which the working class would be the better for possessing, and the possession of which, indeed, would imply a psychological revolution. Where is the note of irony, then? It is in what Dr. Macfie Campbell does not say. The kind of humanism which he is advocating is not, in essence, human at all; it is commercial. He does not recognise, in spite of his humanitarianism, the humanity of the people he desires to help; and at the very moment when he stretches out his hand to them they are not men to him but only workmen. This is proved in the sequel, in which the doctor indulges in a psychological analysis of his industrial patients. Some, he says, "feel the monotony of their task, but get some interest from the relationship of their work to the total work of the plant, or from association with their fellows, or perhaps from

some personal attachment to an employer. Others . . . live in a world of their own imagination, day-dreaming of romance and riches. In others [it is Dr. Macfie Campbell and not M. Anatole France who is speaking] it is the religious attitude towards life that makes the situation tolerable. The lack of satisfaction seems unimportant and the discouragements of this life [long hours and low wages?] seem trivial in the light of the fuller life that is promised by religion [reward in Heaven?], which reconciles the worker to social inequalities and enables him, under hard economic and social conditions, to continue cheerfully productive.' Having mentioned religion, one would have thought that the doctor would have stopped. On the contrary, he rambles cheerfully on. Religion is only one of the means of making present-day industry endurable to the working classes. They console themselves as wen by "joining social organisations in which they are "the biob-sounding names." They nominated to posts with high-sounding names." cheer their leisure by listening to "certain highly intoxicating social doctrines, which hold out hopes of a new order, in which the promises of religion are to be partly realised in this world." But this way of enjoying oneself should be discouraged even if it does show a capacity to "utilise the means of satisfaction available in the environment." "Enthusiasm for these theories leads to the opposite of the resignation that may go with religious belief. The new order is to be realised as soon as possible; persons, institutions, beliefs that stand in the way arouse keen resentment, and, each man's hopes and hates being reinforced by those of his fellows, a powerful force develops, which is the cause of much social rumbling." This is not a good way of preparing for next morning's work; and from the point of view of Dr. Macfie Campbell, men who do not work in order to enjoy in rest the results of their work, they rest in order to work, that and that only. This implication colours his psychological diagnosis and gives it its air of mingled naïvete and irony, unintentional irony from all the evidence. He shows how unconditionally the workers are workers to him by omitting any mention of the chief consolation, and the most human, which they have, for spending their lives in distasteful drudgery. That is their wages, by which they are enabled to live, and in living to be more than workers merely . Dr. Macfie Campbell's most tremendous naïvete, of course, is the assumption that there is a working-class psychology which is different from human psychology. On this assumption the whole movement represented by him, and a whole body of opinion which prides itself on its enlightenment, have been built up. It is not merely held by advocates of this point of view that the change wrought by the Industrial Revolution has in some ways, though not fundamentally, altered the manner of life, and therefore the sentiments and thoughts of the people. To this anyone will agree. But the humanitarian lovers of the present industrial system go further; and in a theory of psychology which is at the same time a piece of propaganda, they hold that the working class should feel and think in the manner most suitable to the quiet working of industry. It is a demand on the whole astounding, and certainly widely made. There is no conceivable reason why a certain machinery of production, having come into existence, should immediately demand a suitable series of emotions and thoughts from those who operate it. But the disposition to found psychology upon output is the last symptom of a determinism so thorough that it is unconscious of itself.

How alike "working class" and "upper class" psychology are one can guess in reading this quotation from an article by Sir Bampfylde Fuller in the "Nineteenth Century." "Business is uninspiring," he says, "and is haunted with care. If we regard the features of our fellow-passengers in a metropolitan railway carriage we find little to show gaiety of heart. Were it not for the relaxation of holidays, which enable us to

play for a while, life would be almost intolerably dull to those whose spirits have not been altogether stifled." To those, in fact, who, born in the working class, would embrace "certain highly intoxicating social doctrines." But to those who are rich enough to have their articles accepted by the "Nineteenth Century," and to those who are poor enough to be "diagnosed" by Dr. Macfie Campbell, the impulse, it seems, comes alike to "live in a world of their own imagination," and even "to make the situation tolerable" by wearing "the religious attitude." Psychologically, there is little to choose between them.

Claude Farrère.

ONLY an image, imperfect as it is, can suggest the vivid feeling of life that inspires the work of Farrère. Some majestic animal turning at bay, its pathetic eyes filled with astonished rage. All of his heroes, civilised and cultured though they be, are carried by the stern logic of events to that moment when one is forced to act, and when only stark instinct remains. Be it Mademoiselle Dax, or "l'Homme qui Assassina" or de Fierce, the hero of "Les Civilisés," the destiny that creates, that conquers and that binds. carries them to the decisive moment when the human ego, torn from itself, is manifested in all its power. But that great protagonist of eternal drama, Fate, changes her look and her gesture with each of them. Sometimes she lies in the depths of hearts, so insignificant a little strength would overcome her: she uses only whatever force is necessary to guide men's lives. In the case of "Mademoiselle Dax, Jeune Fille" fate is almost sordid. A father preoccupied by commerce, dry and masterful, even obstinate; a mother still more obstinate, whose continual misunderstandings with her husband excite her to a greater masterfulness: and her daughter, Mademoiselle Dax, pure, healthy and pretty, perfect in her innocence, whose spirit nothing has ever awakened, who begins to suffer when longings arise to trouble her; to suffer because of the low ugliness of the marriage proposed for her, because of her regret at being torn from a love she thought to be so pure and beautiful, and which destiny only creates in her to

Le Colonel Marquis de Sevigné Montmoron is a great nobleman: his breeding, his intellect, his career as a soldier, present to Destiny an adversary worthy of her mettle; and demand for the action a splendid setting. So Farrère has staged "l'Homme qui Assassina" at Constantinople. Constantinople, the key of Asia, the melting pot of two worlds, the battlefield of two civilisations, the diplomatic centre of Eastern politics. It is, as it were, a diptych in which two races are opposed, two manners of life, two moralities; united only by the personality of the hero who describes it, and by a tragic and simple design. Out of the evocation of the setting, out of the subtle analysis of the thoughts which surge in the heart of Sevigné, out of the simplified but terrific echo of national politics and passions, Farrère has carved the veiled and threatening form of Fate.

The atmosphere in which Madeleine Dax is evolved is slight, more simple. She cannot overthrow the family authority; and the love, sweet and cruel, which struggles against the emptiness of her heart, cannot do more than drive her, with a harsh caress, to some adventure. In "I'Homme qui Assassina," on the contrary, the hero possesses sufficient force of will to urge him to some great deed. His pride, his strength, his chivalrous sadness, are all the instruments of Fate which go to make his destiny more violent. If he had not this instinct for beauty and justice he would not so hate the representatives of the civilisation which has disfigured Europe; and which, spreading itself like an octopus, has choked all that is best in the ancient peoples, their art and thought, and substituted the odious uniformities of great modern cities. Money-

lenders, merchants, bankers, diplomats, gathered like vultures round the dying Turk; with what incisive irony he unmasks and judges them. Pyrote society, with its strange customs, still only half educated, gorged with riches, eager for pleasure, loose in morals official society, where diplomats have forgotten their responsibility to humanity in the performance of administrative and national duties. . . . Bankers, negotiators of loans, beggars for concessions, corrupt and corrupting, who crowd in the drinking shops of Pera, or in other more secret places. . . . world, which his official position as French Military Attaché obliges him to frequent, de Sevigné shuns. How much he prefers to be rowed on the Bosphorus in the caïk presented by his friend, the Chief of Police, Mehmed Bey gliding through the golden mist which softens the shores made rosy by the sunlight; floating on the molten gold of the water; dreaming of the adventures of Roxelane. . . . In the dusk, Stamboul etched upon the sky; her mosques rising like bubbles from among the jumbled roofs; her slender minarets from which fall the shrill voices of the mezzuins. Love, too, of silent Stamboul, with her quiet mystery of winding lanes and her quaint cafés, where, under the cypresses, the old Osmanlis drink from copper cups. A love, too, deep and undisclosed, for his friend, Lady Falkland, whose husband seeks to turn her out of her house, depriving her of her son. And he, to save her, will dog her brutal faithless husband and kill him.

The interest of the book lies in the birth of the decision to kill in the heart of the murderer. Accordingly the method employed is to project us into his consciousness, in such a way that we can follow the development of his sympathies and beliefs in their reactions to facts. The principal artifice is that of giving to the book an auto-biographical character, of having made it the journal of Colonel de Sevigné. Everything that we see, we see by his aid; and we live with him through the emotions which bring him to assassinate. The style, too, is concise; familiar, quick and vigorous. It has an appealing force which makes us think and feel with the person speaking.

One might reproach the author with a too uniform rhythm, a cadence too commonplace, which robs the book of relief; but it must be remembered that it is the testimony of a single personality, and that this uniformity, giving as it does a definite unity to the whol book, is useful in giving it quality. One might complain also of the romantic character of the intrigue; but that would be to pronounce judgment in the spirit of the school, now happily ended, which said that art was only meant to teach.

There has been too great a tendency to think that a novel must be a study of some social milieu; but it is clear that, since to interest is the object of a writer, he must study men, and more particularly one principal character: for readers are not long interested by a crowd, but by a being like themselves; of whom, by experience or by sympathy, they can understand the desires and loves, the angers and the hates. Consequently it is necessary to place the actors of the drama in such a situation that their actions, torn by necessity from the depths of their natures, will enable us to understand them completely. And this crisis should have for background a setting, which if not beautiful, shall at least be imposing, so as to throw the tragedy into relief.

The Ancients understood that the true enemy of their heroes was Fate: the combined objective, social and subjective forces which create, direct and compel men to act and to fight: and the grandeur of the combatants makes the grandeur and interest of the story.

A final quality is the feeling that one is bound heart to heart with his hero. Perhaps that is because, from the beginning, the author has known how to expose his worth and to make him sympathetic to us. But

there is another reason: Claude Farrère was once an officer in the French Navy. The places that he describes he knows; his experiences in life must be analogous to those he imagines; and, since he often gives the same character to the personalities he creates, we may believe that that destiny, ironical, triumphant, eternal, by which he makes them suffer, bears some relation to the facts of his life.

In "Les Civilisés" life unveils itself: life violent, cynical and obscene. Coming to that tropical land of Cochin-China to seek riches, they throw aside work to taste the licentious joys of Saigon at that feast of flesh which is the pleasure of to-day. It is not one of them that Farrère has chosen to study, for such would not recoil from pleasures grown familiar through habit; but a young naval officer, intelligent enough to judge, and not debased enough to like, this life feast of rotten flesh trough of suspect gold at which the colonials satisfy their appetites. He also is a civilisé, of an old and noble family. Henri Comte de Fierce, the last of his name, has passed a childhood similar to theirs: a childhood in which the parents were the first example of that ugliness which the world reveals. He had known the sensual pleasures and the unsatisfying joys which Paris offers to rich young men-wine, women, cards, deceit: unsatisfying, because he still had seen clearly enough to know himself unhappy and ashamed. Everywhere, in London, New York, Tokio, Canton, Hanoï, he has found the same life, and is accustomed to it as a sick man is to drugs. At Saigon it is as a sceptical, melancholy, ironical, young man that his friends know him: Mevil the doctor, worshipper of Venus Pandemos; and Torral the mathematician, entirely devoted to science and his pervert vice. They live and make merry in the midst of a corrupt society, which the climate at once enfeebles, enervates and excites. . . . It is a rich Asiatic country; a powerful sun which kills like a bludgeon stroke; the fragrant earth beneath rank tropical vegetation; strange flowers and fruits; plants as simple in line as they are magnificent and impressive. De Fierce draws from it a kind of animal sensuality, insinuating then imperious, which, more even than his desire and his habits, makes him fall upon the slender body, trembling with passion and with fear, of a girl discovered in a conquered village. These struggles with himself, these falls into abysses of animal love, are the whole story of a hero who, from the moment that he meets, loves, and wins a pure and happy maiden, is disgusted once for all by the degraded life of the civilisés. The ironic fate that leads him ordains that one day his wife shall discover him when all appearances accuse him, and his married life is shattered. His broken destiny ends itself in a naval battle where his supreme consolation is the satisfaction of having fought honourably, and of seeing the enemy ships sink before his eyes. Destruction of life, the pitiful reward for not having known how to live.

The book is one of Farrère's most ample and powerful: in my opinion, his best. His style has a suppleness, a precision and a strength that are admirable. Should he describe a drinking bout at Cholon; or the flowery harbour of Saigon; or a scene of short and brutal passion; or the purity, one almost might say the coldness, of the birth of a deep love . . . the feeling and the language penetrate and illuminate each other in harmony. The three principal characters, Torral, Mevil, and Fierce, are outlined, their lives followed, their thoughts unravelled, with a shrewdness of observation and an æsthetic synthesis that places this book among the best of contemporary novels. falling even a little way into that pit of damnation which is called l'art Enseignant (the Art that Teaches), and without losing anything of æsthetic quality or dramatic interest, the conception, the idea of the book, woven in the texture of events and thoughts, has a

real philosophical interest. Nevertheless a powerful lesson is adduced from the book because it is vivid life at a precise moment, seen by a critical mind, and judged by a great artist.

In this novel one detects more easily the share of personal confession of the author. De Fierce is a young naval officer whose experiences must have been very akin to those of Farrère, and the latter has endowed him with such intimacy as to lead inevitably to the thought of a resemblance. Further, the book exhibits that personal stamp—that romantic sadness—which is not the purely egoist sadness of Chateaubriand or of Byron, but the noble and severe sadness of Vigny.*

It seems that unlike so many authors who write from choice and by profession, Farrère has been, before everything else, a man. It is his need for action, for glory, the call of his deep human quality, that made him a fighter: it is disgust, the sadness of clear vision, that made him abandon his career: and it is the enthusiastic indignation of an artist and of a man that made him a writer when he could say "Es Deos in nobis."

If I have studied principally the three books mentioned, it is because he seems to me to have given in them, more than in others, the measure of his talent and of his generosity. Without entering into details concerning "Dix-sept Histoires de Marins," "La Bataille," "Dix-sept Histoires de Soldats," "Fumées d'Opium," a study of the books written since the war, "La Maison des Hommes Vivants" and "La Dernière Deesse" proves that Farrère has given generously of his personality to his heroes.

I will not neglect "La Maison des Hommes Vivants," a mysterious and gloomy tale in the manner of Poe. This book, in which the fine quality of the style is powerless to make one oblivious of its length, and in which a vague symbolism does not adequately replace thought, seems to me an inferior production, unworthy of the author. What is more serious, one becomes aware of the procedure, the artifice, the knack. . . This fault occurs again in "La Dernière Deesse"-but in it there is at least an idea, feeble but definite: it is this: The Last Goddess is War. War which, while putting men's strength and love to the test, tempers them to a new and better life. Alas, no good has come from this illusion, which Farrère, I am convinced, felt sincerely during the war. In this work, if he does not himself appear, it is still a naval officer who is the principal character; resembling his predecessors as a brother, and speaking in the same simple, elegant, ironical manner, sadder perhaps but there the resemblance ends.

The previous ones were clear in vision, they were alive, they seized the spirit and the decor of life, and made us feel its emotion but one finds nothing of all this in the impossible and romantic adventures of Captain de Folgoët, sailor, musician and chemist. The style, also, becomes a trick; affectation destroys nobility of idea. One can explain this deterioration in two ways, maybe hasty production, maybe it is due to the very quality of his genius. Perhaps both causes run together, but the second, if it be verified by the appearance in the future of a new and great book, will confirm definitely the idea which I have tried to convey of the character of Farrère's work. He is, before everything, a great personality; and enthusiasm for truth and beauty is the motive force of his writing so it is possible that, unlike so many mediocrities produced by war, it has opened in his spirit a new phase, as yet not fully realised; and, that not yet having, so to say, conquered his subject, he is unable to produce a book of the same value as those which were the resultant of completely evolved experiences

^{* &}quot;Servitude et Grandeur Militaire."

and ideas. The matter, the quality of his next book, which I hope is soon to appear, cannot be foretold. . . . Times like unto ours fire the hearts of men like him.

Pierre Robert.

Readers and Writers.

An event that may eventually prove to be of deeper significance than the Treaties of statesmen is the publication in Paris of a new work on Nietzsche. The author, M. Charles Andler, is Professor in the Faculty of Letters in the University of Paris, and though I am not quite sure of his nationality, yet his position is representative enough to justify my claim. The comprehensiveness and distinction of his study of the German philosopher may do more to establish a common European sentiment (or culture) than all the vagaries of the Clarté movement—more even than the unsanctioned efforts of the League of Nations itself. "Nietzsche, sa vie et sa pensée" is to be completed in six volumes, two of which have already appeared. The titles of the volumes will indicate the scope and magnitude of the enterprise:—

- I. Les Précurseurs de Nietzsche.
- La Jeunesse de Nietzsche (jusqu'à la rupture avec Bayreuth).
- III. Nietzsche et le Pessimisme esthétique.
- IV. Nietzsche et le Transformisme intellectuel.
- V. La Maturité de Nietzsche (jusqu'à sa mort).
- VI. La dernière Philosophie de Nietzsche. Le renouvellement de toutes les valeurs.

The first two volumes are priced at 18 francs each, and they are published by Editions Bossard, 43, Rue Madame, Paris. I am convinced that this work will take the very first place among the commentaries on Nietzsche and will remain indispensable to all who take any interest in the development of European culture.

The first volume, it will be noticed, is devoted to the forerunners of Nietzsche. The German heritage is traced to Goethe, Schiller, Hölderlin, Kleist, Fichte and Schopenhauer. The influence of the French moralists is a second category and here we find chapters given to Montaigne, Pascal, La Rochefoucauld, Fontenelle, Chamfort and Stendhal. Finall, there is the influence of the contemporary Cosmopolitanism of Burckhardt and Emerson. It would be impossible to convey here any idea of the scholarship, the force, and the understanding shown in Professor Andler's exposition. In a sense we each have our own Nietzsche, and there may be people who would desire a different emphasis on certain strains in Nietzsche's thought; but personally I think the emphasis falls in the right place—on Goethe, Schopenhauer, Pascal and Stendhal. From these Nietzsche acquired his ideals and attitudes; from Burckhardt, Fichte and Emerson he mostly acquired ideas. From Fontenelle he acquired style-and ideas. It is rather a pleasant surprise to find Fontenelle's name among the precursors of Nietzsche, but it is very just that it should be here. Fontenelle is the essence of that Latin esprit which was one of the most anxious ideals of Nietzsche. In "Les Dialogues des Morts," if anywhere, the divine travels on light feet. Nietsche found in Fontenelle at least one thought that had a deep influence on his development: the same influence he also received from Schiller, Hölderlin and Kleist. All these thinkers agreed on the evil and devitalising effect of thought—or rationality as we should call it. "On devient trop sage (says Fontenelle's Parménisque) et on ne peut plus agir; et voilà ce que la nature ne trouve pas bon." Reflection is paralysis: energy (which is life) demands action.

The chapter on the influence of Pascal is one of the most interesting in the first volume. Pascal, it will be remembered, was for Nietzsche "the only Christian

of any consequence." And near the end of his life Nietzsche wrote of him: "Pascal, for whom I have almost a tenderness, for he has instructed me infinitely." The great debt Nietzsche owed to Pascal was a certain attitude towards knowledge that Nietzsche called "perspectivism." To-day we should perhaps call it Relativity. It arises when we begin to realise that the world is for each one of us a world from a particular point of view. All is relative to the position of the observer. Pascal thought of himself as a man in the midst of "ces effroyable espaces de la nature"; there is no one to say "Why I am in this place rather than in another, nor why this brief period given me to live in is assigned to me at this point rather than at another in the eternity that precedes me and follows me." Our first thought is fear, said Pascal, and Nietzsche, as Professor Andler points out, often gives an impression of the same "metaphysical fright." "Travaillons, donc, a bien penser" concluded Pascal, and his second thought is of the legitimate pride that supports us in the tragic solitude of the This is the attitude Nietzsche introduced universe. into his philosophy. The problem of Pascal was to discover the laws of a universal perspective in thought and morality. The problem of Nietzsche was very similar: "to get to know things as they are. to cure ourselves of the great and ingrained folly of seeking in ourselves the measure of all things." Nietzsche made a noble attempt to reduce the thought of the modern world to a common scale—to understand the world both in its totality and its right perspective.

The influence of Stendhal is one of the most obvious in Nietzsche's thought and personality, but it is nevertheless a pleasure to see it so ably analysed by Professor Andler. To Stendhal more than to any other predecessor Nietzsche owed his conception of life as energy, and of history as a history of energy. energy is invisible, but without it there would be no Centuries pass away without it being seen; but it galvanises everything, like hidden electricity, like a secret dynamic current, from which powerful charges emanate to burst suddenly into those luminous meteors which are works of art." That this conception of energy should develop into a theory of genius, of the superman, and further into the philosophy of The Will to Power was inevitable—reinforced, as it was, by Pascal's "passion de dominer" (with Pascal, however, an analysed fact rather than an affirmative creed), by the "orgeuil" of La Rochefoucauld, and by Fontenelle's "désir de commande-From Stendhal Nietzsche also derived his characteristic æsthetic—his theory and practice of art; his mistrust of the "beau idéal"; his correlation of style and utility, and his definition of beauty as the promise of happiness. "Beauty-in-itself does not exist, any more than Good-in-itself, or Truth-in-itself. In every case it is a question of conditions of survival of a kind determined by men." The platonic theory, in fact, succumbs to the biological theory, which is the utilitarian theory. On it is based Nietzsche's healthy hatred of the baroque, of useless ornament, of elaboration—a hatred that was almost invented by Stendhal, and that is now a commonplace of criticism. From Stendhal, too, Nietzsche derived in great measure his idea of virtue as the increase of happiness among men. "All else (he would say with Stendhal) is merely hypocrisy, or bourgeois stupidity."

I have merely dipped a careless hand into this almost inexhaustible bran-tub. I have scarcely mentioned the second volume, which is a brilliant piece of biography. I have neglected many important theories and many intriguing discoveries. But I may have induced some readers to explore Professor Andler's work on their own account, and better than this I could not do.

HERBERT READ.

Drama.

By John Francis Hope.

THAT "Will Shakespeare" is "an invention," as Miss Clemence Dane calls it, I can verily believe; I will go further and say that it ought to be patented. Some of it is verse, and some of the verse had "no inward necessity" to be verse, as Carlyle said. Take the opening speech, for example:

Supper is ready, Will! Will, did you hear?
A farm-bird—Mother brought it. Won't you come? She's crying in for the basket presently.
First primroses! Here, smell! Sweet, aren't they?

Are the snow-wreaths gone from the fields? Did you go far?

Are you wet? Was it cold? There's black frost in the

My mother says, and spring hangs dead on the boughs-Oh! you might answer when I speak to you!

This may be anything one likes, except poetry; and it seems a criminal waste of paper to space it, instead of running it on. Nietzsche said that when a musician could no longer count three, he became dramatic, he became Wagnerian; and I suppose that feminism in verse is subject to a similar judgment. When we consider that Miss Clemence Dane has spent three years (was it?) on this play, and that the Reandean Company has spent about £10,000 on the production, we can only marvel at the product of the higher education of women. One has to be Varsity trained to be capable of such originality in invention.

I could amuse myself for two or three articles with the verse of this play—there is considerable contempt for "man-made" forms throughout the play, and the actors, I may say, have been carefully trained not to deliver any poetry in their speeches. But let that pass. The only justification for an "invention" concerning historical personages is that it enables us to understand them better than we should do from a reading of the bare facts; and Shakespeare, I think, is entitled to at least as much consideration as Mr. Shaw showed to Julius Cæsar. But Miss Clemence Dane, unlike Cæsar, has no clemency; it is not the man Shakespeare who interests her (he seems to be modelled on the minor Georgian poets), indeed, as her "Bill of Divorcement" showed, she does not understand men. When we think of what Kit Marlowe, "the Canterbury Lamb," really was, and see this eviscerated creature without one mighty line, one magnificent gesture, one Titanic hyperbole, reduced to a mere kisser of women, "a proxy silvertongue," as he is called-we can only conclude that the woman's point of view is not historical. Shakespeare without wit, without the passion that he himself expressed in his plays, with nothing but the decorative stuff of his verse to speak—this is "invention" certainly, but not illumination.

But so far as a feminist can be a woman, Miss Clemence Dane is a woman; and it is on the women that she lavishes her "invention." We grant her Queen Elizabeth, as rare, as European, an event as Shakespeare himself; indeed, those of us who have read Mr. Frederick Chamberlin will think that Miss Clemence Dane has not done justice to the Virgin Queen. But Anne Hathaway seems to be a peculiarly impertinent "invention." There seems to be no doubt that Shakespeare was either forced or cajoled into marrying her against his will; and it is rare "invention" indeed to make Anne Hathaway, who was seven years older than the boy Shakespeare, declare that he seduced her. It is richer still to make her, who was a shrew, a poet and a visionary, seeing all Shakespeare's creations and his destiny as in a vision. Richest of all is the impertinence that asks us to believe that she, Anne Hathaway, to whom he left his "second-best bed with the furniture," and nothing else, was his ideal woman, that it was her love that drew him back to Stratford, to "peace."

Ah, but when you're old (You will be old one day, as I am old Already in my heart) too weary-old For love, hate, pity, anything but peace, When the long race, O straining breast! is won, And the bright victory drops to your outstretched hand, A windfall apple, not worth eating, then Come back to me—

Is hands to serve you and a breast to die on, Come back to me.

The brute fact is that it was to "my daughter, Judith," "my said sister, Joan," and "her three sons," "my daughter, Susanna Hall" that he left the bulk of his property; and to his wife, his "second-best bed with the furniture." Miss Dane's "invention" does not elucidate the facts: whoever may have been Shakespeare's ideal woman, it was certainly not Anne Hathaway with her disregard for scansion, and her lies because she loved him.

Then what is the justification for the "invention"? Even the poetry, as we see, has not sense when it strives for beauty, for windfall apples are certainly worth eating; the ripest fall first. Does it make a good play? After seeing the performance, I cannot say that it does. Perhaps it ought to, perhaps it could be made to grip; the fact remains that it does not. With one or two exceptions, the players seem to be cursed with a sense of unreality; the confusion of styles, the neither poetry nor prose, neither romance nor character, dogs them at every turn. With a character that, I think, is all prose, Henslowe, Mr. Arthur Whitby, could, and did, do something—although very subdued in the presence of ladies. Of Queen Elizabeth, Miss Haidée Wright made something of a character, even when she spoke verse; but the atmosphere, the values, were all those of a woman's college. Where is the Elizabeth who swore like a fishwife, who was the greatest man among men, whose temper was renowned throughout the country? Compare what she really said to Leicester, when he attempted to push by a sentry who had been ordered to permit nobody to pass: "God's death, my Lord, I have wished you well, but my favour is not so locked up for you, that others shall not participate thereof, for I have many servants . . . and if you think to rule here, I will take course to see you forthcoming: I will have here but one Mistress and no Master." See the paltry flapdoodle that Miss Dane makes her speak when she banishes Mary Fitton from the Court. Mary

On none. But I've no time, No room for butter-fingers. Here's a man slain Upon your lap that England needed. Go! Go, blunted tool! I've wronged your betters, Mary, Mary Fitton, As tide wrongs pebble, or as wind wrongs chaff At threshing time.

asks: "Upon what count?" and Elizabeth replies:

I prefer the authentic to the "invented" speech; it is really more dramatic, and has a better sense of style. A majestic fury could not be more dignified than in that speech to Leicester, no meek-tempered man; it is worth bearing in mind in the interpretation of Shakespeare, for those sudden blazes of masterly wrath

were typical with his kings and queens.

I begin to understand now the meaning of that great placard across the front of the theatre: "Will Shakespeare Saved." Saved, of course, in the Wagnerian sense derided by Nietzsche, by love, the love of a housewife and shrew invented by a feminist. If Miss Dane really wants to understand domestic as compared with poetic love, if she wants to know what can be said in favour of the poet's return to hearth and home, I advise her to read the conclusion of "Jurgen." There is no need to romanticise the housewife when the reality can be justified by a reasonable interpretation of facts: and Anne Hathaway, as invented by Miss Dane, has no value outside of a modern High School for Girls.

The Nebular Origin of Life. By Allen Upward.

II.

The Physical Basis of Life. The main assumption on which the chemical school proceeds lurks concealed under the expression "physical basis of life." The biologist may be allowed to say, with Schäfer, that we cannot conceive of life as existing apart from matter. At all events the cell, whose genesis we are in search of, does not exist apart from matter. As Pearson puts it, the physiological unit is constructed out of physical atoms and molecules. There can be no objection to the biologist analysing the material of the cell, in search of light upon his problem. But when he refuses to go further, when he takes for granted that the energy manifested in the cell is, and can be, nothing more than the sum of the chemical energies of its material constituents, then he is making an assumption not warranted by what we know of life and nature. That is the assumption underlying the words "physical basis of life," and on it the hypothesis of "living matter" has been reared.

The distinction between the physical basis of life and the living organism may be illustrated by the familiar whirlpool. The physical basis of a whirlpool is water, or water and rocks. But no combination of water and rocks will produce a whirlpool unless there is also present an energy derived from neither. In the case of a sea whirlpool that energy is derived through the tides from the moon. In the case of a river whirlpool it is derived from the sun, which has drawn up the water by evaporation, and thereby given it what is called energy of position.

It is on this question of energy that everything turns. The difference between a whirlpool and a pool is the whirl. If we should assume that the whirl is a chemical property of the water, and seek to account for it by chemical differences between the water of a whirlpool and the water of a pool; and go on to postulate the existence of a "whirling water," to be found in Nature, or reconstituted in the laboratory; we should be doing exactly what those biologists are doing who confound the physical basis of life with life.

A living organism is not differentiated from inorganic matter only, or mainly, by its material constituents. The outstanding characteristic of the cell is its cellular energy, that is to say, its organic or living energy; and it is this energy that has to be accounted for by any sound theory of the genesis of the cell. Natural science -and it can scarcely be necessary for me to confess that the word supernatural is a word which I do not understand-can conceive of three possible sources for the energy of the cell; the energy of its parts; external stimuli in the form of light or heat or similar agents; and an inherited energy transmitted to the cell by its progenitors. It is this third factor, sometimes spoken of as vital energy, which the spontaneous or chemical theory of biogenesis seeks to exclude. It will be seen from this that the inquiry into the genesis of the cell divides itself into two questions: (i) Does the cell possess an inherited energy? and, if so, (ii) whence is that energy originally derived?

The biologist who recognises in the cell an organic energy, distinct from the chemical energy of its material constituents, may attempt to derive it from the "living matter" postulated by Schäfer and his school. Now there is no evidence, so far, of the existence of any substance which can be called living matter, apart from the living organism itself. Neither is its existence a logical corollary from what we know, like the ether postulated by physical science. It is a mere deduction from ignorance. The last generation of biologists, provided with less powerful microscopes than ours, overlooked the importance of the nucleus in the life of the cell. They treated the entire cell as a globule of one

undifferentiated substance, which they named protoplasm. They dissected out the matter of the cell, ignoring the nucleus, subjected it to a chemical analysis, and pronounced it to be the physical basis of life; much as if one should dissect out the contents of an egg, ignoring the yolk, and pronounce it the physical basis of poultry. The first consequence of this rash generalisation was Huxley's unhappy discovery of the Bathybius Haeckelii, which he mistook for a genuine specimen of "protoplasm."

The last word of biological science, or speculation, on the subject shows that nothing has been learnt from the experience of past error. The assumption has merely been shifted from the white of the egg to the yolk, from the body of the cell to the nucleus:—

It has lately been independently suggested by Professor Minchin that the first living material originally took the form, not of what is commonly termed protoplasm, but of nuclear matter or chromatin: a suggestion which appears by no means improbable.—(Schäfer, "Life.")

This assumption that the whirl is a property of the water causes the biologist to confine his research into the origin of the whirlpool to the chemical origin of the water:—

As we see every day with our own eyes how living substance is formed from lifeless, and changes back into it, we may assume that it had its first origin in inorganic matter. We have the more right to do this since no element has yet been found in living matter that is not found in the inorganic world.—("Darwinism and the Problems of Life," by Professor C. Guenther, Eng. tr., p. 313.)

Against this complacent dogmatism we have all experience summed up in Redi's famous axiom, *Omne vivum ex vivo*. Arrhenius quotes Kelvin nearly to the same effect:

"Dead matter cannot become living without coming under the influence of matter previously alive."

Pearson pronounces equally against the generation of living from lifeless substances. The exact reverse is manifest in nature. As I put it many years ago: "Everywhere the cell makes the shell, and nowhere does the shell make the cell."—("The New Word," XV, 2.)

A minor assumption, which is responsible for the importation theories of Kelvin and Arrhenius, is also treated as indisputable by Schäfer:

There was certainly a period in the history of the earth when our planet could have supported no kind of life, as we understand the word; there can therefore exist no difference of opinion upon this point among scientific thinkers.—("Life.")

A biologist who had before him no organism except warm-blooded ones might assert with equal confidence that the depths of the sea could support "no kind of life, as we understand the word." Such generalisations about life leave out of account the influence on habit of environment; in short, they ignore the theory of evolution. If organisms which cannot now exist under water are nevertheless descended from other organisms whose habitat was the sea floor, it should be possible to conceive of their being descended from organisms able to resist conditions of heat or cold which would be fatal to themselves. If the sylph was once a nymph, why not a salamander?

All these difficulties, and all these assumptions, melt into thin air when we approach the problem from an impartial standpoint. One intelligent glance only is needed to show us that the problem is one of the persistence of motion rather than of matter. The history we have to investigate is that of cellular energy, and not that of albuminous proteids. We have not to seek the origin of the water, but of the whirl. The material constituents, or to speak scientifically, the medium, of the whirl can only be a secondary consideration. The waterspout begins as a cloudwhirl; the whirlwind

crosses the desert and becomes a sandwhirl. In the same way it should be conceivable that the present constituents of the cell have been taken up, and made part of its being, by an organic energy originally manifested in some quite different medium. When the question takes its true shape we may find that those very conditions of our planet which have been set up as the terminus of inquiry will help us to the right answer. For the life germ may prove to be descended from a more energetic parent whose life was not destroyed, but fed, by planetary fires.

Cellular Energy. The best known activities of living organisms differ in the degree of their importance for the problem, though all have to be accounted for by a sound theory. The most significant seem to be these:

- (i) The reaction of organisms to their environment. This mark does not greatly differentiate them from inorganic substances. Hence it is in this particular that an analogy has been found in the colloids.
- (ii) Their growth by the absorption of non-living matter. This growth is differentiated from that of crystals, which gain by simple external addition of the same material; whereas the organism selects from foreign compounds those elements which it can assimilate, and incorporates them with its own substance by complicated internal processes.
- (iii) Their continuous changes of substance, while they retain their integrity of organisation. This constitutes their closest analogy with the whirlpool, in which the water continually changes, while the whirlpool preserves its identity.
- (iv) Their production or reproduction of other individuals or units like themselves. Some analogy to this process is presented by the action of a solar nebula in generating planets and moons, as it were, the children and grandchildren of the sun.
- (v) The activity which is specifically organic, that is to say, the action of a machine as distinguished from its parts, or of a regiment on the march as contrasted with the aimless movements of individuals in a crowd. It is the cessation of this activity which we recognise as the death of the organism. Its disappearance, often the result of a purely mechanical shock, sets free the chemical energies latent in the "physical basis" of the organism, and decomposition follows. This cardinal phenomenon calls for more explanation than it has yet received in any chemical theory of life.

The most striking indication that this organic energy is mechanical, rather than chemical, in its character is furnished by the passage of life from unicellular into multi-cellular organisms. All the organic activities of the cell, in moving, breathing, eating, reproduction and so forth disappear from the incorporated cells, to reappear as organic activities of the collective body. We seem to see a number of minor vortices sinking their individuality as they come together to unite in a greater vortex. (All this, however, is strictly a question of degree; because no one who does not realise that chemical action itself is ultimately mechanical has a truly scientific mind.)

(vi) Except in the case of plants, whose history reveals that they have degenerated in this particular, living organisms enjoy a freedom of motion which differentiates them from inorganic bodies. Their obedience to those external forces which control the pebble or the globule appears to be modified by a voluntary or spontaneous power of movement in themselves, not directly derived from their environment. This semi-detachment from the planet is, to my mind, the most interesting and significant of all the physical marks which distinguish the organism from inorganic substances; and with other than strictly physical phenomena I am not now concerned.

This raises in my mind the question whether living organisms may not be studied with advantage

as cosmic individuals with a cosmic history of their own, instead of as recent segments of planetary material. It does not follow that they must needs be recent immigrants from some other planet or system. The only scientific way of pursuing the inquiry is by examining such cosmic phenomena as are already within the field of our knowledge, in search of sound analogies.

Cosmic Analogies with Life. It is tempting to look for a direct analogy in the cosmic phenomenon which so much resembles the whirlpool, with which life has been compared already. The great nebulas present to the telescope an appearance of vortical motion in harmony with the theory of Kant and Laplace as to the history of our solar system. If it would be premature to speak of their energy as organic, perhaps it may be permissible to describe it as organising. However, the problem of the forces at work in the nebula is an intricate one, and in view of the recent trend of astronomical theory, it may be safer to pass at once to the consideration of our own system.

Whatever be the true theory of the formation of the planets, a question to which the answer of Laplace seems no longer universally accepted as complete, there can scarcely be much danger in assuming that their separation from the solar mass took place before they had acquired their present density and distinctness of outline; and when they were in a condition which may be described as nebulous or nebuloid. They may fairly be conceived of as incandescent masses developing a rotary, and even a vortical, motion of their own, in addition to their orbital motion around their parent body. And the same view may be taken of the early history of their moons.

There are, however, lesser bodies in the solar system than the regular planets and moons; and a review of them, as they are enumerated by Procter, in his work on Saturn and its system, may guide us to a reasonable induction when we come to the story of our own planet.

In the zone of asteroids we have an undoubted instance of a flight of disconnected bodies travelling in a ring about a central attracting mass.

The existence of zones of meteorites travelling round the sun has long been accepted as the only probable explanation of the periodicity of meteoric showers. The rings (of Saturn) are composed of flights of dis-

The rings (of Saturn) are composed of flights of disconnected satellites, so small and so closely packed that, at the immense distance to which Saturn is removed, they appear to form a continuous mass.

The singular phenomenon called the Zodiacal light is, in all probability, caused by a ring of minute cosmical bodies surrounding the sun.—("Saturn and Its System," and ed., p. 135.)

and ed., p. 135.)

It has been suggested that the appearance of the Zodiacal light in equatorial regions may be explained by supposing it to be a ring of minute satellites surrounding the earth.—(Ibid., footnote.)

The existence of the foregoing phenomena, and the explanations offered for them, clearly justify a hypothesis that our planet may have been encompassed, at one stage of its history, by a shoal of insect moons, comparable in their nature with those of Saturn's rings. In fact there is no reason to exclude the possibility that other planets beside Saturn and the Earth may be surrounded by innumerable similar satellites, too minute to be brought within the range of our existing instruments of observation. The generation of such minor satellites in the case of the earth can easily be shown to have been a probable, if not a necessary, accompaniment of the birth of our great moon, as it has been envisaged by Sir George Darwin.

On his theory the entire planetary mass, as it was first separated from the solar whirl, assumed a pearlike shape, in which the future moon formed the smaller end. The gradual detachment of the tail of the pear from its head, occurring while the whole mass was still in a nebuloid state, would naturally produce an umbilical cord of nebular matter, one portion of

which would ultimately be attracted to the moon and the other to the earth. The varying degree of the attraction exerted by the earth upon the links of such a chain, according to their distance from her, would operate to break up the trailing mass into disconnected bodies which would tend to group themselves around the plane of the equator in imitation of the particles of Saturn's rings. That the theoretical existence of such a body of minute satellites presents no difficulty to the mind of the astronomer appears from Procter's note on the subject of the Zodiacal light.

(To be concluded.)

Views and Reviews.

HUMAN PROGRESS-I.

This series of essays,* although "written at different times for different occasions," does present a mental unity. "In the history of mankind, during these last few thousand years, in which mankind has begun to have what may be called in the more special sense a history, the two predominant factors appear to be (1) the rise of rationalist culture, first in the ancient Greek world and then again in modern European civilisation, and (2) the entrance of the Christian life into the world process," says Mr. Bevan in his preface. That those two factors are both complementary and antagonistic is obvious; and is nowhere more clearly demonstrated throughout Mr. Bevan's attempt at a synthesis than in his essay on Progress. For the belief in progress may be a pure faith, or apparently a reasoned conviction from facts; and there is no gainsaying Mr. Bevan when he says: "Belief in progress has by no means been a universal characteristic of human thought. It seems to me to belong essentially to that form of civilisation which has been developed during the last few centuries in Europe." For this generation, indeed, it may be said to be a development of the theory of Evolution since Darwin.

For the Greeks began with the idea of a Golden Age in the past, from which their present was a declension. The Stoics elaborated the cyclic theory (as opposed to the Homeric linear theory) of the eternal recurrence of things, while the Indians, of course, have gone further still in the elaboration of the cyclic theory; India "has not been content with the simple repetition of a mahayuga, but has combined the mahayugas in still larger and larger cycles." It would be interesting if some psychologist could demonstrate the reliance of such theories on the geometrical forms used for the observation and measurement of the solar and stellar systems; it seems significant that the cyclic theory of eternal recurrence should coincide with the belief in the circular orbits of the bodies of the solar system, and that the belief in progress should "belong essentially to that form of civilisation which has been developed during the last few centuries in Europe," approximately coinciding with the demonstration of the elliptical orbits of the planets. The further demonstration that the whole of our solar system has its own proper motion through space, and is answering to the pull of some attraction in the region of the constellation Hercules, coincides with the development of the belief in "some far-off Divine event towards which the whole creation moves." The very point of the the whole creation moves." The very point of the eastern edge of the constellation of Hercules towards which the sun is moving was determined by Newcomb as having a right ascension of about 277°.5 and a declination of about 35°. The paradox of the belief in progress and of the eternal recurrence of events is thus embodied in the very motion of the universe; the wheels may go round and round, but the whole machine is going forward, and it ought not to be difficult to find the corresponding phenomena in humanlife.

The particular form in which Mr. Bevan raises the question is: "Does the Christian hope, or, to make the inquiry wider, does belief in God warrant a belief in the continuous progress of humanity on this planet?" He answers the question for himself: "I do not feel that the Christian faith necessitates a belief in the progress of humanity upon this planet, in the improvement of the world." Neither does Science, as usually stated; for we do know with peculiar exactness the necessary conditions of life as we know it upon this planet, we do know that those conditions have not always been present (a mere alteration of a few degrees in the tilt of the earth would wipe out life over large regions, perhaps from off the planet; and the belief that such calamities have occurred is not confined to ancient prophetic writings) and there is every probable reason to suppose that if things proceed as they are proceeding, the conditions necessary to life on this planet will not always be present. On this basis, whatever advances humanity may make, whether we do really go forward or round and round, we shall all bescrapped at some time or other-and whatever the Divine Purpose may be, it will not find its final expression on this planet or in humanity. Mr. Shaw has faced the problem in his "Back to Methuselah," and other works; and contemplates with apparent equanimity the obliteration of humanity-while protesting with Samuel Butler against evolution that it "banished Mind from the universe.'

The situation seems hopeless, and men have driven themselves mad about the problem. Let us see how Mr. Bevan handles it:

One cannot, it is true, argue from one's certainty of a Divine Purpose an equal certainty that human progress on this planet will still go on. But if we believe in a Divine Purpose, then we must hold that the progress of humanity hitherto, from the brute to primitive man, from primitive man to civilised man, has been part of God's design. And if God's design has up till now meant a gradual ascent of man upon this planet, that is surely, so far as it goes, a reason for anticipating that God's design will involve an analogous ascent from stage to stage in the future. This globe may be only the platform which mankind crosses, and the true history of mankind may follow the line of his passage into the Unseen, not the succession of generations upon the earth. Granted, and yet the earth, too, as the sacred vehicle of man's spirit in this phase of its being, may have a history of its own, guided to a worthy end.

One must face the assertion that life will become impossible upon the earth after a limited term of years. If the scientific view is right, which foresees an extinction of life under the stress of cold or heat or drought, this means not only that the history of the race cannot go on beyond that point, but that the final extinction of the last man will be preceded by ages of decline, ages during which man will wage an ever losing battle with Nature. My own feeling with regard to a pessimism based on such an anticipation is that all forecast our science can at present make with regard to such a remote future must be extremely doubtful. How, for instance, could any calculation based upon the natural forces in play upon the globe, before the appearance of life, have ever forecast the marvel of life and its developments in beast and man? And how do we know what may not be produced by new spiritual forces, entering into the present world, as organic life entered into the world of mechanical nature? There has been, at any rate, a movement of thought in our time towards emphasising the elasticity of life, the scope of initiative, the freshness of things really new, the incalculable possibilities of the future.

The problem really condenses to the question: "Is vital evolution co-extensive with physical evolution?" It corresponds to the problem of consciousness in psychology, and is worth considering in another article.

^{* &}quot;Hellenism and Christianity." By Edwyn Bevan. (Allen and Unwin. 12s. 6d. net.)

Reviews.

Beauty and the Beast: An Essay in Evolutionary Æsthetic. By S. A., McDowall. (Cambridge University Press. 7s. 6d. net.)

Mr. McDowall accepts Croce except for his "rejection of a metaphysic and his denial of a God." Art is not only expression, he says; it the expression of relationship-and relationship is Love. The process of Art is as follows: I observe some external thing which is not in itself beautiful, but arouses in me a sense of beauty when I intuitively understand it as "part of a whole which is Reality." Beauty, however, is expression; my intuition must therefore become clear and I must express it to myself, whether I give it technical embodiment or not. What I express, however, is not a mere "imitation," but the essence of phenomena whereby they are united to the sum of Reality, including myself. Human "dissatisfaction is due to a sense of imperfect interpenetration"—to the inability to create, to repay life for all it gives us and in the payment to establish harmony. Art is thus an activity as well as a perception: it not only contemplates the principle of relationship, of love, which informs life and is God, but aids it. Beauty, which is the immediate knowledge of relationship, is thus eternal, since love is the principle of Reality, and forever new, since "God must continually express His Being as love else He would cease to be at all." It is not surprising, after this, that Mr. McDowall should dissent from Croce on one fundamental point, and should hold that "Beauty must be a first and not a last consideration for metaphysic." In trying to define art Croce reduced it to its lowest common factor: he said one or two things which are incontestable simply because they are the minimum which could be Mr. McDowall errs, perhaps, in the opposite direction: he does not say too much, and his conclusions are more exciting than Croce's, but he lacks Croce's exactitude and naturalism, and his aesthetic gives us in the end no criterion by which works of art may be judged. What he does is to play a few metaphysical variations on a theme by Croce, whereas what is required is a body of criteria based upon the minute but valid dogma which Croce established, that art is Croce was the starting-point of a new aesthetic, and he was no more than the starting-point. Since he destroyed the old standards, criticism has been in a state of anarchy: and this condition will not be remedied until new standards such as Croce cannot destroy have been established.

Conquest. By Gerald O'Donovan. (Constable. 98. net.)

This book is the penalty we have to pay for not settling the Irish question sooner. It begins as a promising novel, with some insight into character and a certain skill in making it self-explanatory. But after about fifty pages it trails off into a succession of dinnerparties at which the Irish question is discussed from all points of view; it covers the period of contemporary history up to the suppression of the Sinn Fein Parliament. Apparently one cannot buy a paper, eat a dinner, fall in love, do anything in Ireland without raising an interminable discussion of England, its nature, policy, and professions. We have read it all in innumerable leading articles, political pamphlets, and books; and it really does not make brilliant conversation. It does not even help us to unify our impressions of Ireland; it is impossible even after wading through these discussions to see what part Ireland plays in English history except that of a thorn in the flesh. That may be her tragic destiny, for all that we know; anyhow, the eleutheromania of the Nationalist Irish is simply neurotic, it lacks world-vision, it makes of Ireland a mere backwater of evolution. It may be England's fault, of course, but stupidity was a valid defence even in theology; and superior acuteness has its obligation of making things dear. Mr. O'Donovan does not help us to a decision; with Ulster shrieking "desertion," and the rest of Ireland "hypocrisy," what are we to do but what we have done?

From Newton to Einstein: Changing Conceptions of the Universe. By Benjamin Harrow, Ph.D. (Constable. 2s. 6d. net.)

In spite of one or two journalistic touches Dr. Harrow is a good expositor. His explanation of Newton, whom we know already, is clear; and he manages to keep our expectations up until he reaches the timespace combination of Einstein, but there he expectedly fails us. As it is, he has perhaps done all that popular exposition can do with Einstein; for in order to understand the precise constitution of the time-space unit, the capacity to follow a difficult mathematical demonstration would be necessary. For the rest, the author explains, with an adroitness which is a pleasure to watch, how Newton's postulation of an absolute time and space was wrong, and by what reasoning Einstein disposed of it. Even the popular elucidation of "strains" and "distortions" in space is not beyond him. His illustrations are always useful and never fanciful; and he is interesting without being paradoxical—the mark of the good teacher.

Winsome Winnie: and Other New Nonsense Novels. By Stephen Leacock. (The Bodley Head. 5s. net.)

Burlesque, unless it is funny without reference to the original, is a childish pastime; it is among the most elementary of the attempts to overthrow authority by selfassertion. Mr. Stephen Leacock's burlesque novels are seldom intrinsically funny, and the types he burlesques are not the least obviously ridiculous. "Winsom Winnie," "narrated after the best models of 1875," only leaves us wondering which is worse, the original or the burlesque; there is, so far as we can see, no reason why it should not be published in a magazine devoted to sentimental fiction. "John and I, or, How I Nearly Lost My Husband" is a far better study; it is at least a consistently ex parte treatment of the feminine conception of marriage. But "The Split in the Cabinet' says nothing, and arrives nowhere; and the burlesques of the murder mystery, of the "blue island' nonsense, of the lordly plumber, the idiotic despatch rider, the ghost story, barely raise a smile. We have seen these absurdities for ourselves, and Mr. Leacock's humour is painfully obvious. Burlesque may justifiably out-mode its model, but Mr. Stephen Leacock's burlesques produce the impression that they are attempts to reproduce the model which have failed. There is nothing more sad than the joke that failed.

LETTER TO THE EDITOR.

"THE SERVILE STATE."

Sir,—A correction to one sentence in Mr. Bechhofer's letter appearing in your current number (December 22): "State Socialism, alias Lenin's 'State Capitalism,' was Mr. Belloc's notion of the Servile State." No. The thesis of my book, "The Servile State" (in which the term is, I think, first used and defined) is that modern Capitalism is but an ephemeral, unstable and transitional phase on its way towards a permanent and stable form of society which I call "The Servile State" and which I define as "A state of society in which certain fully free citizens can compel, by positive law, the other inhabitants of that society to produce wealth for them," i.e., a return to the old servile status on which antique society reposed. This I said was the practical result to which Capitalist society was tending, especially under the effect of Socialist theory. The goal might not be reached, for, against this pagan reversion there was the continuous counteraction of the Catholic Church.

H. Beiloc.