the people do for themselves. Other parties too, besides the economist, who may at first have feared for their favourite cause or peculiar tenet, will find that the author's frank criticisms are directed to the improvement of industrial character, without bias in favour of Orangemen against Catholics or Unionists against Nationalists. Trojan and Tyrian have seldom been treated so "indifferently." To the even-handed criticism which has been bestowed all-round on Irish institutions it has been archly suggested that there is one exception—"The Department." To us it appears that a little parental partiality towards a successful creation is natural and venial, and not much calculated to impair the general worth of our author's judgments. If we are right in ascribing a peculiar value to these judgments as being based on a large practical experience and expressed with unique fearlessness, they cannot fail to be highly prized by such as are disengaged from party contests. In that class we may include Posterity; who will perhaps find in these pages a picture of Irish conditions as instructive, if not as artistic, as that which is presented in Berlesey's *Querist.* If our author's words prove as effectual as his work, and the effect of both is as permanent as it is beneficial, he will deserve the prophetic eunomium which was bestowed upon him in a recent debate by the Chief Secretary for Ireland: the name of Horace Plunkett will be remembered, "enshrined in History with the names of Arthur Young and Thomas Drummond."

*The Theory of Loan Credit in Relation to Corporation Economics.*


Mr. Norton is favourably known to students of abstract economics by his brilliant attempt to apply the higher theory of probabilities to the phenomena of the money market. The very competent reviewer of that essay in the *Economic Journal* (1902, p. 618) was justified in expressing a wish for "more such studies." This wish is now fulfilled by Mr. Norton's method of representing the distinction—one of degree rather than kind—between the fixed and running expense of a business. "The correct statement is that expenses may be ranged along a frequency distribution according to the ratio which they vary with output. The vertical scale [the ordinate] in the above figure [a curve of a kind familiar to the student of probabilities] represents amount of expense, and the horizontal axis [the abscissa] the form-rates at which expense
varies with output." The average value for the upper half of this frequency curve is taken to represent fixed expenses; the average for the lower half, running expenses. Upon this construction it may be remarked that the rate at which each kind of expense varies with output does not present a quite clear idea, in the absence of explanations which the author has not vouchsafed. Does not this rate depend on the magnitude assigned to the output? For a very small—a differential—output the rate is presumably zero with respect to expenses other than prime cost in the narrowest sense of that term. If finite differences of output are to be considered, there must be contemplated a rearrangement of the factors of production; and accordingly the rate in question will depend on the magnitude of the increment to the output. We may likewise complain of enigmatic brevity in the explanation of the scheme which is designed to represent the probability that the earnings of a concern will be large enough to assure a certain rate of interest for loaned capital.

These constructions subserve the purpose of throwing light on the business of companies. The mathematical student is assisted in one of his most difficult and important tasks: to obtain a neat but adequate formula for profits as dependent on incommings and outgoings, a clear and appropriate conception of the principles on which a manager or entrepreneur acts in fixing those economic variables of which he has the control. Among such variables our author gives a prominent place to prices. "The principles underlying railroad rates so clearly worked out by President Hadley underlie the price policy of modern business in general." Perhaps the writer applies the term "monopoly" too unreservedly to any business in which the manager has some power of varying prices. To take our own illustration (cp. Economic Journal, 1897, p. 235), hotel-keepers in the same neighbourhood may be free each to fix his own charge for wine, candles, and so on, and yet they may be subject to what Cairnes called industrial competition, in so far as the net advantages offered to customers cannot be very different for the same total charge. We are not convinced that transactions should be described as "non-competitive" because "the consumer cannot detect differences of 60 to 100 per cent," as Mr. Norton shows reason for believing. For, suppose this to be true of wine in the instance just given: a hotel-keeper would then be tempted to serve the same wine at different prices under different labels; and the scale of charges might vary according to the honesty and discretion of different managers. And yet, as it appears to us, the

vol. iii.
industry is not on that account to be described as non-competitive. It is rather a sweeping assertion that "there never was a competitive price fixed by theoretical supply and demand curves, except in the case of a few staples capable of being graded." Even where this statement is literally true, may not the play of competitive forces, whereof supply and demand curves are the outcome or expression, still subsist in its essential character—for instance, in the labour market, and in transactions respecting house accommodation? (Cf. Marshall's Principles of Economics, Vol. VI. ch. ii. § 2, note 3.) In short, the author may seem to exaggerate the element of monopoly in modern business. But no doubt it is a very important element, and he has done well in formulating its action more clearly.


The work before us, equally with the financial "Institutions" which were reviewed some years ago in the Economic Journal (1897), p. 402, commands our admiration as a sound and solid body of economic doctrine. A particularly agreeable feature is formed by the frequency of allusion to economic literature. From the space occupied in the index by references to J. S. Mill we have calculated that Mill is cited more than ninety times by our author. Professor Loria is cited more than a hundred times. It should be added that the references to economic literature are not only abundant but recherché.

This general encomium does not preclude our dissenting from the author on a particular point, the very point which obliged us to qualify our approbation of his earlier work. Professor Graziani still adheres to the declaration that a specific tax on a monopolised article does not necessarily, in general, tend to raise the price of the article; "it may be the interest of the monopolist either to raise the price or to maintain the original price." This thesis having been disputed in the review of 1897, Professor Graziani defended himself with spirit in a brochure entitled, Sulla Ripercussione delle Imposte nei Casì di Monopolio (a proposito de alcune osservazioni del Prof. Edgeworth). This rejoinder provoked a reply—in legal phrase a "surrejoinder"—in the Economic Journal for 1898. Professor Graziani now follows with a "rebutter." But the reader must not expect from us a "surrerebutter." Even at an earlier stage we had observed that economic controversy is a thankless task, because you cannot hope