to the heir, who would get the whole on his mother's death or second marriage, and on his brothers and sisters attaining full age. This would remedy the great hardship of the present law as regards freeholds, would, I think, make a useful alteration in the law of chattels real, and would certainly facilitate the transfer of land by simplifying the title to chattels real, without embarrassing to any appreciable extent that of freeholds.

V.—*On the Creation of a Public Commission for the Purchase of Land for Re-sale to Tenants in Ireland.* By Francis Nolan, Esq. Barrister-at-Law.

THE return published in the year 1874 of the number of landed proprietors in Ireland, drew at once attention to their very limited number. The total acreage of Ireland is 20,047,572 acres, whilst the number of proprietors (excluding town holdings, but including even those who hold less than an acre) is only 19,228. But indeed almost half the island appears to belong to 742 favoured persons—742 proprietors, holding each over 5,000 acres, own 9,830,332 acres, of which the government valuation is £4,140,414. The government valuation of the entire of Ireland, excluding towns, is £10,182,681. In England for many years there has been considerable complaint of the small number of proprietors; but contrasted with Ireland, their number is very considerable, probably fourteen times as many, whilst the acreage of England is not much more than a half greater than that of Ireland—viz., 29,179,622 acres.

The above short summary of the result of Irish Doomsday Book shows that any measure calculated to increase the number of proprietors ought to be favoured. It is not my intention in the present paper to enter upon the vexed question of landlord and tenant. That such a question not only exists, but that its final settlement is the most difficult of Irish political questions, few will deny. Nor do I seek to demonstrate the desirability in itself of a peasant proprietary. All that I can do is to refer those who are opposed to their creation to the pages of Mr. Mill's great work on Political Economy, where the advantages to be derived from their existence are so clearly and so forcibly pointed out. Until that work was published, many well wishers of the tenants assumed that the creation of peasant proprietors was ruin to those who became such. Want of thrift and minute sub-division were considered immediately to follow. Taking up country after country in Europe, Mr. Mill has shown the benefits to be derived from such proprietors and the fallacies of arguments which were really English objections to a system of which they had no experience. All who have travelled in the countries which he cites as examples must acknowledge the accuracy of his statements. There is one matter, however; which I wish to guard against; that is the all but universal assumption that the creation of a peasant proprietor necessarily confers on him the right to subdivide his land, and that the only restraint in his so doing is self-interest. There is

nothing to prevent a declaration of law where a person acquires in fee under any statute passed for such purpose (say twenty acres of land), that it shall be unlawful to create a tenancy on it. The introduction of a tenant on the land, in the teeth of such a proviso, would then create no estate in the person so introduced. He could be turned out at any moment as a mere intruder. Where a lease in Ireland contains a declaration that a tenant shall not sub-let, the attempted creation of a sub-tenancy passes no estate. For instance, in such a case, suppose a tenant, whom I shall call A, introduces a sub-tenant, B, with even the verbal assent of the landlord. A continues to receive rent from B, and possibly has received a fine for the creation of such sub-tenancy; yet it has been decided in Ireland, and is now the settled law, that although the landlord does not interfere, that in fact no sub-tenancy has been created, and A can at once eject his sub-tenant without the latter having any claim either at law or in equity. This is not a theoretical case; it has arisen, and been so decided. The doing so may seem hard, but the law has been so made to carry out a public policy. I have dwelt on the above matter because this argument of sub-division—which is really untenable—is the one most often urged by some, who assume they are speaking in the interest of the tenant against the creation of peasant proprietors.

What I propose to make a few observations on, is assuming the desirability of increasing the number of proprietors in Ireland. What is the best way of doing so? I do not intend here to advocate any measure of doing so by compulsion. What I seek to inquire into only is, how it can be done voluntarily without in any way interfering with vested rights? It is a well-known fact that in the year 1870 an effort to do so was made by the Irish Land Act. Whilst the clauses of the first part of the Land Act conferred on tenants legal rights which they never before possessed, the clauses of Part II. and Part III. admittedly almost completely were devoted to the object of this paper. They have always been known in Ireland as the Bright clauses; for shortly before that Act was introduced, Mr. Bright delivered a great speech in this city, in which the Liberal party of the day were pledged to introduce a measure for such an object. At the time of the passing of the Land Act they seem to have attracted but little attention. The attention both of the opponents and the friends of that great statute was directed to clauses 1, 3, and 4, which conferred on the tenant a legal right of occupancy, which in law he did not before enjoy. The Bright clauses in their nature were known to have been drawn by those who were acquainted with the difficulties of the conveyance of real property. They dealt with a subject—the transference of real property—which unfortunately in England and in Ireland few but trained lawyers can understand. It is well known no person but a lawyer can investigate even the most simple title. It was tacitly assumed by the public that these clauses, drawn by clever men to carry out a policy advocated by statesmen, were drafted in a workable condition. Experience has proved the contrary to be the case. They are admitted to have completely failed. From August, 1870, down to the close of

1877, 740 tenants have in all availed themselves of Parts II. and III. of the Act. The gross purchase-money of such sales was £718,304 17s. As the number of the tenants in Ireland is over 600,000, it is evident that many centuries must elapse before these clauses in their present condition can have any appreciable effect on the internal condition of Ireland. Nor in examining the Bright clauses is there much difficulty in discovering the reason of their failure. The wonder rather is how they ever could have been expected to succeed. By the Bright clauses of the Irish Land Act, peasant proprietors were sought to be established in two distinct ways—the one was by an agreement between landlord and tenant for the voluntary sale to the tenant of his holding, through the medium of the Landed Estates Court; the other was to facilitate the purchase by tenants of their holdings, when from any cause they were for sale in the Landed Estates Court. Part II. of the Irish Land Act deals exclusively with the former plan. It enables an owner of land, whether or not it is encumbered, to sell to a tenant his holding, with the approval of the land judges. The meaning of the word owner is very wide; it includes tenant for life. Where such a purchase is about to be carried out, the Board of Works can lend to the tenant two-thirds of the purchase-money, which is to be repaid by an annuity, calculated at five per cent. on the money lent, which lasts for thirty-five years. But many stringent and unnecessary conditions hamper such loans. In supposing that any practical result would come from such a plan, the legislature simply ignored the cost of conveyancing, of making out title, and the fact that an incumbered owner would in most cases derive no pecuniary benefit from such a plan. It is well known that the cost of making out title to a single holding on an estate is the same as making out title to the entire estate. To such cost, which is always considerable for a transaction under this part of the Act, is added the cost of the proceedings in the Landed Estates Court, and that of establishing the title of the tenant to his own interest. It was proved before the Select Committee of the House of Commons that £100 was the minimum cost of the proceedings in the Landed Estates Court alone, without counting the personal costs of landlord or tenant. This cost must ultimately fall on the landlord, no matter what agreement he makes with the tenant.

But apart from the question of cost, there is the objection that such a sale in many instances is productive of pecuniary loss to the owner, from the fact that the purchase-money, if there is no incumbrancer ready and entitled to receive it, must be invested in the 3 per cent. stock, at an average rate to produce $3\frac{1}{4}$ per cent. This was forcibly illustrated by the Right Honorable Judge Flanagan, in his evidence before the Select Committee of the House of Commons, by a case which had actually occurred. Sir Compton Domvile, a large owner, as tenant for life of an incumbered estate, agreed to sell two holdings to a tenant for £2,905, of which the rent was £142 15s. At last the sale was completed at a cost of £202 3s. When the money was paid into court the following occurred:—The first incumbrancer was a lady who had a jointure; the second, an Assurance Company, who had a mortgage for a large amount, but were willing to accept part

payment. But the lady objected that the money should be so applied, and insisted that it should remain as security for the payment of her jointure, although without it the security was ample. The result was, the judge had no alternative but to direct the money to be invested in Consols, which produce as interest £62, less than the former rent.

The entire number of sales in over six years under Part II. being only 19, according to the report of the Select Committee, it must be admitted to be a complete failure.

Part III., as contrasted with Part II., has met with more success; but as down to the end of 1876 but 526 purchases had been made under it, such success is of a very limited character. Where an estate is sold by the land judges, sometimes it is sold by private treaty, but oftener by public auction. It is put up in lots. As a rule, a lot includes many tenants. The putting up each holding in a lot practically has the result of limiting, in the case of small holdings, the bidders to the tenant himself. The Irish Land Act contained, however, a section to this effect:—

> "The Landed Estates Court shall, in the sale of estates by said Court, so far as is consistent with the interests of the persons interested in the estates or the purchase-money thereof, afford, by the formation of lots for sale, or otherwise, all reasonable facilities to occupying tenants desirous of purchasing their holdings under the provisions of this Act, and for that purpose shall hear any application in that behalf made by the Board, or any such occupying tenant."

At one time it was sought to be established that the clause gave each tenant a special right to have some opportunity of purchasing his holding. But it is now clearly established that it practically gives him no right. The latest case on the subject is that of the Harenc estate. At the enquiry before the Select Committee of the Commons, it was sought to show that the Bright clauses owe their complete failure to other causes than those of their intrinsic worthlessness. It was said that the Landed Estates Court and the Board of Works had not favoured them—that the amount of money advanced by the state on loan to the tenants was too small; but although the enquiries showed that the Government could advance as much as four-fifths of the purchase-money to the tenant with perfect safety, yet it failed in any way to show what the Landed Estates Court could do which they had not done, without detriment to owners and incumbrancers. The answer to such objections immediately was that the primary duty of such a court as the Landed Estates Court is to realise as large a fund as possible by the sale of the estate. The putting up by auction each holding separately would spoil the sale, not only of such holding but of the residue. Few would care, except as a mere pecuniary speculation, to purchase a townland with a small holding in its centre, owned by another in fee. If the holding of a small tenant was put up for auction by itself, no person would bid against him if he was anxious to purchase. The evidence of the Right Honorable Judge Flanagan on the subject, answer 3,136, is remarkable:—

> "When the holding is small, it is idle to tell me that any man will bid against the tenant. I do not say they never do it, but very occasionally

and rarely they ever do it. I would like to see a man who would bid against a tenant, if his holding were put up separately. I think he would be a very bold man who would venture to do that."

So convinced of this are the Land Judges, that except in a few exceptional cases holdings are not put up in separate lots, without the consent of the owner, except when the tenant has previously agreed to bid an upset price. Indeed, of the entire number of holdings purchased by tenants down to the close of the year 1876, but 164 cases occurred where tenants purchased in the first instance their holdings separately. In the remaining 359 cases the holdings were purchased in lots, and then separate conveyance made to each tenant on the lot. It must be conceded that the putting up each holding separately deprives the owner of the benefit of an auction.

Influenced by such motives, owners as a rule have hitherto opposed the sale of the estates to tenants, not through ill-will to the tenant, but solely out of regard to their own pecuniary interest. A very remarkable case has recently been decided on appeal, which is calculated much to confirm owners in such opposition, and which at the same time conclusively and in a most marked manner shows how completely the Bright clauses have failed in enabling tenants to become purchasers of their holdings, at the admitted fair value.—I refer to the case of the Harenc estate. That case is worthy of the closest attention, as it shows not only the reason of the failure of these clauses, but the only true remedy—the creation of public board to purchase lands for sale for the benefit of the tenants—a measure which I advocated almost immediately on the passing of this Act, and which has recently been recommended by the Report of the above Select Committee of the House of Commons.

The Harenc estate is situated in the County of Kerry; it was owned by trustees, with a full power of sale; practically it was unincumbered, but some of the *cestui que trusts* were minors. The lands being for sale in the Landed Estates Court, the trustees agreed to sell the entire estate to the agent, a Mr. Gentleman, for £65,000. The tenants came forward and moved the court that such sale should not be confirmed, as they were anxious to purchase, and guaranteed at least £10,000 more. The court, acting in the interests of the *cestui que trusts*, refused to confirm such sale. 94 tenants then proposed for their holdings; of such proposal 73, amounting in all to £51,627, were considered adequate, whilst 25, the aggregate amount of which was £12,414, were considered inadequate. The residue of the property amounted to £484 a year rental, occupied by tenants, and £150 a year unoccupied. The residue, if sold, must at the lowest calculation have produced, one would have expected, twenty years' purchase.

It is thus evident that if the trustees accepted the offer of the tenants, and sold the residue, in any point of view many thousands over what they were willing to have sold the property for to Mr. Gentleman would have been realized. However, the trustees did not do so, and agreed to sell entire estate to a Mr. Hussey for £80,500. When the motion for the acceptance of this offer came on, the tenants intervened, and offered £81,000 for the estate, by two persons—Messrs. Lombard and Murphy—acting on their behalf, who as a guarantee of their good

faith offered to bring £20,000 into court. In the meantime they held a meeting, in which they denounced the conduct of Mr. Hussey in purchasing over their heads.

The judge accepted the offer of those acting for the tenants, although the trustees insisted that the offer of Mr. Hussey should be taken. An appeal was taken. It was decided that the offer of Mr. Hussey should be accepted, and the trustees allowed thus to select their own purchaser. It was on the latter principle the case would appear to be decided, although much comment was made on some irregularities in the form of the proposal on behalf of the tenants, and the fact that the judge had before him no proof of the solvency of those who acted for the tenants. Such proof is not usual in proceedings in the Landed Estates Court. But neither had the judge proof of Mr. Hussey's solvency, although no doubt it was well known. There was no question on this head, and those acting for the tenants had offered to bring £20,000 into court. But if the case had been decided on those minor points, the course probably would have been to have referred back the case to the judge below to consider them, and then accept the best offer, or dismiss the petition.

Now the fact of a meeting being held to denounce an intending purchaser will no doubt, in analogous cases, prevent owners from entering into negociations with tenants. But this case could not have occurred if there had been a public board willing to buy in the name of tenants. The trustees might well, acting for infant *cestui que trusts*, say they preferred the offer of Mr. Hussey to the higher offer of those they were unacquainted with. But if a higher offer had come from a public board, could they for an instant have refused it without being guilty of a gross breach of trust ? There can be but little doubt if such a board existed, that most of the Harenc tenants would have become peasant proprietors.

The creation of such a board, if it is practically feasible, is the real solution, and indeed the only solution of this question. It seems to be that which Mr. Bright originally advocated, and which probably would have been incorporated in the Irish Land Act, if Mr. Bright had been a working member of the cabinet when that measure passed. Unfortunately at the period, when his service could have been of so much avail to Irish tenants, he was stricken down with that temporary illness which all deplored.

That there would seem to be but little practical difficulty in carrying out such a measure, the great success which has attended the sale of land by the Irish Church Commissioners would seem to establish. It is known such lands vested in the Commissioners the year preceding the passing of the Irish Land Act. The Commissioners were authorised to sell such lands, being bound to give the refusal of the purchase of each holding to the tenant owning same. The annual rental of the property so vested in the Commissioners was £95,430. The entire number of the tenants were 8,432, excluding perpetuity holders. Three-fourths of the purchase-money was allowed to remain outstanding, payable in sixty-four half yearly instalments. The interest charged on such purchase-money was nearly 4 per cent. —greater than that charged under Parts II. and III. of the Irish Land

Act. The entire number of tenants who up to the 7th of June, 1877, had purchased under the Church Act, was 4,930; the rental so purchased, £61,458 2s. 7d. The entire purchase-money, £1,350,541. The average number of years' purchase of agricultural holdings is 23¼. Of the residue, 1,120 holdings were sold to the public, and produced on an average 21¾ years' purchase.

It is evident that the clauses of the Irish Church Act have met with great success. Mr. Godley was asked by the Select Committee of the House of Commons to what he attributed such success. His answer was: "I attribute it to the fact that the Commissioners are both the owner and the sellers, and have nobody to consult but themselves."

It may be said that if a public board were to purchase estates for sale, that the tenants, knowing that the state would never eject, so long as a fair rent was paid, would cease to have the great wish they now undoubtedly possess to purchase their holdings, and that such a gigantic scheme as the state furnishing funds for the purchase of all estates for sale, did not enter into the region of practical political undertakings. Such an objection is of great weight; but it is at once removed if the obligation was thrown upon such a board, of reselling all lands they purchased not previously disposed of to tenants, in a limited period—say five years. No doubt, such a sale would not be beneficial for such tenants as were unable, through no fault of their own, to purchase their holdings. Holdings of tenants dotted here and there between holdings held in fee would not be desirable purchases. Probably the purchasers would be pure money speculators —that class which the tenants naturally most detest. In other words, buying the holdings merely to make money, they would eject the tenant, if they thought they could do so by such an act. But this objection would to a great extent be met, if not overcome, if the public board were directed to give leases for thirty-five years under section 28 of the Landlord and Tenant (Ireland) Act, 1870, to all tenants who had failed to become proprietors; and if such lease contained a clause that at its expiration the tenant could claim, notwithstanding it, under all sections 3 and 4 of the Irish Land Act. Such a lease would leave the tenant in a better position than if he were left a yearly tenant under an ordinary purchaser in the Landed Estates' Court. Of course such a board for the purchase and re-sale of land might lose as a pecuniary speculation; but bearing in mind that land in Ireland, when sold in small quantities, produces great prices, it is improbable that they would. At present large sums are left idle by the tenants in Ireland, on deposit in the bank, which would probably be invested in such purchases. The experience of the Church Act is against such loss. But such an objection would be of more weight if it was proposed to tax England as well as Ireland for such a novel undertaking. But it is known that it has been proposed that a portion of the Church Surplus Fund should be devoted for such a purpose. This is money peculiarly belonging to the Irish, and as the landlords as a class have been principally benefited by the portion of the Church Fund, devoted as a bonus to encourage commutation, it is not unreasonable that some portion of it, say a million, was devoted to the purely tenant purposes. Nor, indeed, if there was a

loss could it be very great. It would require the purchase of many millions of property, before on the resale as much as the loss of a million would occur.

It has often occured to me that the best way of judging the practicability of a plan is to draw a rough draft of an Act of Parliament which would profess to carry it out. I have sought to do so. I believe such an undertaking could be carried out by a very short Act of Parliament. The following draft contains thirteen clauses, but the entire plan is practically embodied in seven clauses. The following is the general form of an Act which I would suggest.

"*A Bill to facilitate the Purchase by Tenants in Ireland of their holdings.*

"Whereas it is desirable, for the purpose of increasing the number of landed proprietors in Ireland, to facilitate the purchase by tenants of their holdings. Be it enacted:

"1. There shall be appointed under this Act two persons, Commissioners, by Her Majesty, by warrant under the royal sign manual, and they shall hold office during Her Majesty's pleasure, and if any vacancy occurs in the office of any Commissioner, by death, resignation, incapacity, lapse of time, or otherwise, Her Majesty and her successors may, by warrant under the royal sign manual, appoint some other fit person. The Commissioners appointed under this Act shall be a body corporate, with a common seal, and a capacity to acquire and hold lands for the purposes of this Act, and shall be styled 'The Commissioners for the Purchase of Land.' Judicial notice shall be taken by all courts of justice of the corporate seal of the Commissioners, and any conveyance or other document purporting to be sealed therewith shall be received as evidence, without further proof. No commissioner shall hold office, as such, for over ten years, but shall be eligible for reappointment.

"2. The said Commissioners, hereinafter called the Commissioners, shall from time to time purchase land for sale in Ireland. In carrying out this Act, the Commissioners, as far as possible, shall purchase land of which a considerable portion is suitable for resale to tenants occupying same. The Commissioners, in making such purchase, shall in all cases require that the title to the land to be conveyed to them, shall be either under the Act known as the Incumbered Estates Court (Ireland) Act (12 & 13 Vic. c. 77), or under the Landed Estates Court (Ireland) Act (21 & 22 Vic. c. 72). All land purchased by the Commissioners shall be entered under the Record of Title (Ireland) Act, 1865. The Commissioners shall within five years after they have purchased any lands occupied by tenants, offer to each tenant of a residential holding on such lands, the option to purchase his holding on such terms and on such conditions and subject to such charges as the Commissioners shall seem reasonable. All conveyances in fee by the Commissioners, of holdings to tenants occupying same, shall purport to be made under this Act.

"3. All lands conveyed in fee to the tenants occupying same under this Act, shall be called parliamentary land by the Commission-

ers. It shall not be lawful for the owner of such land, without the consent of the Commissioners, to create any tenancy on same, or in respect of same, and any tenancy created in violation of this clause shall be null and void.

"4. The Commissioners shall sell all land purchased by them, not occupied by residential tenants, in such a manner and to such persons or person as the Commissioners shall think fit. The Commissioners shall sell all land occupied by residential tenants who shall have neglected to purchase same, upon the terms proposed by the Commissioners, to such persons or person as the Commissioners shall think fit.

"5. After the expiration of five years from the purchase of any land, the Commissioners shall sell same, or such portion of same, as shall not be previously disposed of under this Act, in the High Court of Justice in Ireland, Chancery Division, before the Land Judges, and shall immediately on the expiration of such period of five years take the necessary proceedings for such sale. Previous to selling any portion of same occupied by residential tenants, the Commissioners shall offer a lease for thirty-five years of his holding to each residential tenant, under section 28 of the Landlord and Tenant (Ireland) Act, 1870. Each such lease shall contain a clause that the tenant, at its expiration, may claim under section 3 of such Act, and also under section 4 of such Act, for all improvements.

"6. There shall be issued to the Commissioners, for the purposes of this Act, at such time, and in such sums, and in such manner as the Treasury may determine, any sums of money, not exceeding in the whole £1,000,000, and the Treasury may from time to time issue to the said Commissioners the said sum of £1,000,000 out of the funds arising from the surplus of the Irish Church funds.

"7. The Commissioners in carrying out this Act shall have full power to fix the price at which any of the lands purchased under this Act shall be sold. But the Commissioners in carrying out this Act shall endeavour to provide that the money invested under this Act shall produce at least $3\frac{1}{2}$ per cent. interest, but not more than 4 per cent., after payment of all expenses incident to carrying out of this Act. The Commissioners shall in the first place pay out of the rents and profits of the lands purchased under this Act, and the profits (if any), on the re-sale of same, the expenses incurred in working this Act, including losses occasioned by the re-sale of any land, and shall hold the balance for such public purposes as Parliament shall direct.

"8. The Commissioners may from time to time, with the consent of the Lord Lieutenant, appoint and remove a secretary, and appoint and remove such officers, agents, clerks, and managers, as they deem necessary for the purposes of this Act. They may also employ such valuators and other persons as they may think fit, for the purpose of enabling them to carry into effect any provision of this Act.

"9. The Commissioners may from time to time, with the approval of the Lord Lieutenant, make, and when made, may revoke, annul, or add to rules, with respect to the following matters: (1) The proceeding to be had under this Act. (2) The circulation of forms and

directions, and the giving notices to tenants as to how this Act is to be carried into execution. (3) The scale of costs to be charged in carrying this Act into execution. Any rules made in pursuance of this section shall be laid before Parliament within three weeks after they are made, if Parliament be then sitting, and if Parliament be not then sitting, within three weeks after the beginning of the then next session of Parliament. The Commissioners shall prepare in such form and at such period as the Treasury shall direct, accounts of the monies received by them under this Act, and the expenditure of same, and shall transmit same to be audited, certified, and reported upon, with reference to the provision of this Act, and in conformity with the powers and regulations prescribed in the Exchequer and Audit Department Act, 1866.

"10. There shall be paid to such commissioners, such secretary, officers, agents, clerks, messengers, valuators, and under persons employed under this Act, such sums, subject to such provisions as the Lord Lieutenant shall appoint.

"11. Section 44 of the Landlord and Tenant (Ireland) Act, 1870, shall be amended, by substituting the words four-fifth for the words two-third, wherever such words occur in such section. The Board may lend to any tenant four-fifths of the purchase-money, under such section, to enable him to purchase his holding under this Act, notwithstanding that at the time of such purchase a portion of the holding of such tenant may be sublet. No holding purchased under this Act shall be forfeited under said section to the Board, by means of assignment or alienation of same, other than subletting.

"12. In this Act the following words shall have the following meanings:—'Residential holding' shall mean a holding within the meaning of the Landlord and Tenant (Ireland) Act, 1870, occupied by one tenant who usually resides on same. 'Tenant' shall have same meaning as in Landlord and Tenant (Ireland) Act, 1870.

"13. This Act may be cited as the Proprietors Purchase Act, 1879."

VI.—*The Periodicity of Commercial Crises, and its Physical Explanation.* By Professor W. Stanley Jevons, LL.D., F.R.S., Professor of Political Economy in University College, London.

THE depression of trade, which has now lasted for some four or five years, with gradually increasing intensity, has naturally attracted considerable attention. All kinds of reasons have been offered to explain its origin—wars, foreign competition, luxurious living, the greed of capitalists, the errors of trades unions, and the like. No accidental cause, however, is sufficient to explain so widespread and recurrent a state of trade. The present depression is no new and exceptional phenomenon; it is, as I shall show, only one instance added to a long series of events of the same kind, occurring with remarkable regularity at intervals of about ten years. The cause can only be found in some great and wide-spread meteorological influence recurring at like periods.