shop, at his task, with his tools, on his terms. He knows that industry, to be successfully conducted, must be controlled by its responsible head. He sees all around him men who have risen from the ranks of labor to become the conductors of business, no one hindering them, all applauding their efforts and rejoicing in their success. He knows that for himself and his children the way is open clear up to the top. The American workingman can be reasoned with, and that not on a low plane only; he is capable of understanding and appreciating almost any consideration relating to the market; his spirit is that of civility, reciprocity and fair play; he cordially and intelligently accepts, in its full economic bearings, the maxim, "live and let live." Had it been left to our native population alone, not one of those violent and reckless attacks upon production and transportation, which have, within the past two or three years, shocked the whole industrial system and have come near to produce a general crisis of trade, would ever have taken place.

IX.

ATTACKS ON THE DOCTRINE OF RENT.

483. Bastiat.—A doctrine of such far-reaching consequences as Ricardo's doctrine of Rent has not been allowed to stand without suffering many and vehement assaults. The French Bastiat has, in his eloquent and witty work, "The Harmonies of Political Economy," undertaken to demonstrate that Rent, proper, economic rent, does not exist; that it is purely a fiction jointly maintained by the economists and the communists; that all which the landlord receives for the use of his land is nothing but the proper remuneration for the labor and capital expended in inclosing the land, providing means of access, draining, manuring and otherwise improving the soil, erecting buildings for sheltering the produce, housing the laborers, etc. Inasmuch as Bastiat's objections to Ricardo's doctrine were far

more strongly and clearly stated by the late Mr. Henry C. Carey, of Philadelphia, I pass at once to the consideration of the views of the latter.

484. Carey.—Mr. Carey's attack is twofold. His first argument is founded on a "comparison of the cost and value of existing landed capital." To use his own phraseology, "There is not throughout the United States, a county, township, town, or city, that would sell for cost; or one whose rents are equal to the interest upon the labor and capital expended."* And Mr. Carey draws what he regards as the logical inference from this alleged fact: "If we show that the land heretofore appropriated is not only not worth as much labor as it has cost to produce it in its present condition, but that it could not be reproduced by the labor that its present value would purchase, it will be obvious to the reader that its whole value is due to that which has been applied to its improvement."

Now, it appears to me to not only that this is not "obvious," but that something very like an Irish bull is to be found here. The trouble with this argument is its superabundance of proof. The effect is much the same as that which results from a superabundance of powder in charging a gun.

Had Mr. Carey been able to show that, in any case taken, a county, township, town, or city was worth exactly as much in labor as it had cost, the coincidence of amounts would at least have suggested, if it did not create a proper presumption to that effect, that the labor expended was the cause of the value existing; but when Ricardo's critic asserts that any farm and any collection of farms, has cost more, often far more, than it is worth, he furnishes the means for his own refutation.

Suppose the present value of a piece of land to be represented by 100 units, while the value of the labor it has cost to "produce" the farms found thereon, is represented by 125. Now, says Mr. Carey, inasmuch as the land is not at present worth more than 100, while the labor invested in it was worth

^{*} In stigmatizing this doctrine he continually joins together the names of "Ricardo and Proudhon."

^{*} Carey: The Past, Present and Future, p. 60.

[†] Carey: Political Economy, vol. I., p. 102.

[‡] This discussion of Mr. Carey's propositions is abridged from my work, "Land and Its Rent," published in 1883.

125, it is clear that nothing but the labor has entered to give value to the land!

But how so? What has become of the 25 which was in excess of the 100? Lost, says Mr. Carey, since, "as labor is improved in its quality by the aid of improved instruments, all previously accumulated capital tends to fall below its cost in labor."*

Ah! but if that 25 can be lost and has been lost, how can you show that another 25 has not been lost, and still another 25, through the operation of the same cause? How can you prove that proper economic rent does not enter? How, indeed, can you prove that the present value of the land is due, in any part whatever, to the labor expended in the past?

John Smith's barn has been broken into, over night, by burglar who sawed a hole through the door to effect his entrance. Mr. Carey, in the interest of justice, appears next morning among the excited throng of neighbors, and produces a board taken from James Brown's woodshed, which, though not corresponding to the guilty hole in size or shape, is yet large enough, as he explains, to allow just such a piece to be cut out of it, thus conclusively proving James Brown to have been the robber of John Smith's barn!

485. How the Value of Agricultural Improvements should be Estimated.—An argument that breaks down thus, under the slightest strain, can not be worth further notice on its own account; yet we may find matter of not a little economic interest in following out the question here raised, as to the relation between what Mr. Carey calls the cost of producing farms and the value of farms when "produced."

First. To begin with, all statements regarding the amount so invested in any country or district are based on comparatively little information. The data are few and meager, even for making estimates. Accomplished statisticians, accustomed to deal with computations relating to agriculture, like Mr. Robert Giffen, Professor Thorold Rogers, or Sir James Caird, would scarcely presume to claim approximate accuracy for any estimates they might make regarding the

amount of labor involved in bringing even a limited agricultural region into its present state of productiveness.

Second. Again, wholly in addition to the difficulty encountered in estimating the amount of labor involved, would be the difficulty of computing the money value of that labor. While some great works of improvement are effected by bodies of hired laborers working through the year or through the agricultural season, most farm improvements are effected in the off season, when the wages of hired labor are very low,—perhaps only one-half what they would be at another period of the year; and probably the greater part are effected by the labor of the owner or occupier of the land and his family, in fragments of the day which would not otherwise be utilized, or in portions of the year when little or nothing of the current work of the farm can be done.

Third. The element of interest can properly be introduced into such computations only in respect to a very small proportion of agricultural investments.

In general, where capital is applied, it is in the expectation of an immediate improvement of the productive power of the land, the annual increase of the produce being relied upon to furnish at least the annual interest upon the investment, so that, speaking broadly, in any comparison between the cost and the value of landed property, only the first cost of the improvements should be set against the ultimate value.

There are cases, of course, where capital is applied to the land in the view alone of a distant increase of value. Here, within moderate limits of time, the inclusion of interest is not unreasonable. But even here, and even within comparatively brief periods, the application of the principle of geometric progression, in the form of compound interest, is of very doubtful propriety. Geometrical increase is rarely attained and never long maintained in things human. Contemplating an actual instance of such increase within the field of industry, the most unreasonable expectation which can be formed concerning it, is that it will continue. That it should continue long, is not so much unlikely as impossible.

Sir Archibald Alison, in his discussion of the British Sink-

^{*} Political Economy, vol. I., p. 35.

ing Fund, states that "a penny laid out at compound interest at the birth of our Saviour would in the year 1775 have amounted to a solid mass of gold eighteen hundred times the whole weight of the globe." So, doubtless, it might be shown that the value of Adam's first day's work in the Garden, properly compounded during six thousand years, would amount to more than the present value of all the lands of the world, and consequently that all the work that has been done since, in bringing the soil under cultivation, has been thrown away!

The incredibility of geometric increase through any considerable period of time can not be too strongly impressed upon the student of economics. The produce of a single acre of wheat, sown over and over for fourteen years, would cover all the solid land on this planet. The spawn of certain fish would suffice in even fewer years, if reproduction went on in geometrical progression, to fill to the brim the basin of every pond, lake, river, sea, and ocean.

Hence we see the utter inconsequence of computations into which compound interest is allowed to enter, except in strict subordination to common-sense. Probably there is no way in which a man can so quickly and so conclusively show himself unfit to be listened to, as by appealing to geometrical progression for the proof of an economic or social theory.

Fourth. But the consideration of greatest importance in computing the cost of "producing" farms, is that, in general, agricultural improvements are compensated, and are expected to be compensated, upon the principle of those annuities in which a certain number of annual payments both yield due interest on the purchase money and extinguish the capital itself, as when a man for \$1,000 (on which the normal interest would be \$50 or \$60) purchases the right to receive \$120 a year for a certain term, with no claim on the principal thereafter.

Now, is this so, or is it not? Let us satisfy our minds on this point; for if the proposition just now stated is correct, it disposes effectually of the argument against the economic doctrine of rent derived from the fact of expenditures in "producing" farms.

That this proposition is correct, is, I think, proved conclusively by the fact, abundantly established by English experience, that there are few classes of improvements known to agriculture which a tenant for 33 years will not make at his own expense, notwithstanding the certainty that he will cease to enjoy the benefit of them at the expiry of his lease.

Do not the several considerations adduced, and especially the last, take away all the force of this labored argument against the doctrine of rent?

486. Mr. Carey's Historical Argument.—But Mr. Carey was not satisfied with one refutation of Ricardo's law. He attempted and, to the satisfaction of his disciples, achieved, a second demonstration of its falsity. That this subsidiary argument against the doctrine of rent should have been for a moment admitted, affords a striking proof of the weakness and vagueness with which economic questions, especially those affecting the land, have been discussed.

"It will," Mr. Carey says,* "be perceived that the whole system (of Ricardo) is based upon the assertion of the existence of a single fact, namely, that, in the commencement of cultivation, when population is small and land consequently abundant, the soils capable of yielding the largest return to any given quantity of labor alone are cultivated.

"That fact exists, or it does not. If it has no existence, the system falls to the ground. That it does not exist, that it never has existed in any country whatsoever, and that it is contrary to the nature of things that it should have existed, or can exist, we propose now to show.

"We shall commence," he says, "our examination with the United States. Their first settlement is recent; and, the work being still in progress, we can readily trace the settler and mark his course of operation. If we find him invariably occupying the high and thin lands requiring little clearing and no drainage, those which can yield but a small return to labor, and as invariably traveling down the hills and clearing and draining the lower and richer lands, as population and wealth

^{*} Past, Present, and Future, p. 23.

increase, then will the theory we have offered be confirmed by practice,—American practice, at least.

"If, however, we can thence follow him into Mexico and through South America, into Britain, and through France, Germany, Italy, Greece, and Egypt, into Asia and Australia, and show that such has been his invariable course of action, then may it be believed that when population is small and land consequently abundant, the work of cultivation is, and always must be, commenced upon the poorer soils; that, with the growth of population and wealth, other soils, yielding a larger return to labor, are always brought into activity, with a constantly increasing return to the labor expended upon them."

487. All this is Irrelevant to the Doctrine of Rent.—I will not say, with Prof. Roscher, that Mr. Carey's lengthy exposition is "rank with inexact science and unhistorical history." It does not matter a particle, so far as the validity of Ricardo's doctrine is concerned, whether Mr. Carey has correctly apprehended or grossly misapprehended the facts of human history, in the respect under consideration.

Let it be conceded that the order of settlement in all new countries is that which Mr. Carey has indicated,—the new-comers taking up light, dry, sandy soils, which will yield a quick return to the labor of the colonists, aided by their scanty capitals; and that it is only when wealth has been in some measure accumulated, after the first severe struggle to maintain existence, that deeper and richer, but cold and wet soils, are opened, the forests cleared, the swamps, rich with the vegetable mold of centuries, drained. What, pray, does all this prove, so far as the doctrine under consideration is concerned? It is absolutely indifferent to the matter at issue.

It is true that Ricardo assumed, for the purpose of illustrating his doctrine, that the soils first cultivated, within any considerable country, were those most productive. It also appears from the context, that Mr. Ricardo really supposed that this was the historical order of occupation. Yet the economic law of rent has reference alone to lands under cultivation AT THE SAME TIME; and would have precisely as much validity if

every thing which Mr. Carey has contended for, regarding the actual order of settlement and cultivation, were conceded, as if the hypothesis of Ricardo were historically accurate.

488. Is this History indeed Historical?—I have said that the complete establishment of Mr. Carey's historical order would not effect the validity of Ricardo's law of rent; and that, therefore, one might, for argument's sake, concede the accuracy of the narrative concerning the early settlement of Europe, Asia, and America, which occupies so large a portion of his treatises.

But while the historical order of settlement is thus of no consequence as affecting the economic law of rent, it must be admitted that important consequences would follow the establishment of the proposition that "the work of cultivation is and always must be commenced upon the poorer soils; that, with the growth of population and wealth, other soils yielding a larger return to labor are always brought into activity; "or, as the author elsewhere expresses it, that the settler invariably travels down the hills, clearing and draining the lower and richer lands, as population and wealth increase.

What are the economic consequences which, as we have said, would follow the establishment of Mr. Carey's proposition? These: that, instead of the increase of population lowering the margin of cultivation, and thus enhancing the aggregate body of rents,* it would be shown to have the effect, by stimulating the cultivation of better lands, to throw out the poorer (the first cultivated) soils, and thus to raise the lower limit of cultivation, and thus at once to diminish the share of the produce going as rent to the landlord, and to increase the average produce, per capita, of the community. Rents will still be determined by the Ricardian formula; but the importance of rent as a factor in the distribution of wealth will be diminished.

In view of the importance of these consequences, let us proceed to examine Mr. Carey's sweeping assertions regarding the actual order of settlement and occupation, for the purposes of agriculture. Let us see whether this history be indeed historical or not.

^{*} See par. 257.

In the first place, we note that the detailed accounts relate, in the main, either to the settlement and cultivation of countries in ages when military necessities were a controlling force, or else to the very earliest stages of settlement and cultivation of the land, under circumstances which made the needs of immediate subsistence peculiarly urgent, as in the new States of the American Union, eighty, sixty, forty years ago.

It would take more time than we have at command to go through the history of the settlement of Britain, Italy, Greece, Germany, and other ancient countries, and attempt to analyze the influences which determined the selection of lands for habitation and cultivation. When we contrast the sites of nearly all ancient and medieval cities, built upon the towering rock, with the utterly indefensible sites of our modern cities, we can well understand that not economic but political and military exigencies may have given a strong preference to high and rugged ground, even for agriculture, in the days of almost universal warfare. The crops, indeed, raised on such ground would neither be so ample, nor obtained with so little effort and sacrifice, as those which might have been raised in the fertile valleys below, but they would be in a less degree subject to be swept away by occasional forays of armed bands.

Fortunately, we do not need to enter into an analysis involving so much time and labor, and perplexed by so many uncertainties regarding the facts with which we should have to deal. If the forces which in those days determined population to high and poor soils were exclusively or even predominantly economic forces, we shall not fail to find them operating to control the occupation of new countries in these times of general peace. Let us then consider the course of settlement in the United States. Mr. Carey himself expresses his preference for investigation in this field. "Their first settlement," he says, "is recent, and, the work being still in progress, we can readily trace the settler, and mark his course of operation." *

489. Take the Case of Ohio.—And, to further narrow the field, let us confine our view to the State of Ohio. This State is as favorable as any to the theory under consideration. "The early settlers," says Mr. Carey, "of Ohio, Indiana, and Illinois uniformly selected the higher grounds, leaving the richer lands for their successors."*

The settlement of Ohio may be said to have been in progress all the time between 1802, when its inhabitants were fewer than 50,000, and 1832, when its population had reached 1,000,000: in progress in this sense, that not until the latter date had settlers found their way into every corner and county of the new State.

Now let it be conceded that throughout this period Mr. Carey's statement regarding the course of occupation holds good substantially. I say, substantially, because to justify the assertion that the settlers "uniformly" selected the higher grounds would require a greater amount of particular and local knowledge than any one man ever possessed.

How much, then, would there be in this fact, admitted for the sake of argument, which should be in contravention of the economic doctrine of rent? These early settlers of Ohio were, in the first instance, necessarily controlled in their "location" by considerations relating to the transportation of their products and to communication with the settlements they had left behind. Now, advantages of situation, as we have before seen, enter just as fully into the net productiveness of any tract of land, according to Ricardo's doctrine, as advantages arising from superior fertility. Even in illustrating the origin of rent (par. 259) we assumed the existence of a very productive tract, situated at so great a distance that it would not be occupied until cultivation had been driven to descend through several successive stages within the territory immediately surrounding the market.

But, secondly, the early settlers of Ohio were largely compelled by the immediate exigencies of pioneer life to do something different from that which would have been the most advantageous had they possessed an ample store

^{*} Past, Present, and Future, p. 24.

^{*} Past, Present, and Future, p. 32.

of necessaries and of the utensils and materials of industry. New-comers must needs do, not what they would, but what they can; they must raise a quick crop, by little labor; and it is natural enough that they should generally seek the side-hill, which is self-drained, and the open country, which does not require clearing, and the thin, dry soil, which gives a speedy, though not a large return.

They still seek that land which will be most productive under the circumstances in which they find themselves placed; for, as Professor Johnston* has well said, that which would be rich land for a rich man may be poor land for a poor man.

490. But the question I wish now to raise is, whether, when the first exigencies of pioneer life were passed, when some store had been accumulated, when population had become sufficiently dense to allow a reasonable degree of co-operation in labor, when time had been afforded to lay out roads and bridges and to perfect the means of transportation, when the capabilities and resources of the land had become thoroughly known,—whether then it remained true that cultivators in Ohio neglected the best soils for those of an inferior quality?

If not, the fabric so laboriously reared for assaulting the stronghold of the economists, tumbles to the ground, of its own weight. How much does it matter that the people of Ohio, while they were first spreading loosely over the State, took up lands as is asserted, unless it can be proved, or at least a strong presumption can be established, that they continued to take up poorer soils, in preference to the best? Mr. Carey asserts that the hypothetical order of settlement is "universally false"; that is, it is false as applied not to one but to all stages of the history of any community. As this matter is important, let us formulate it somewhat rigidly.

Let us suppose the possibly cultivable lands of Ohio to form seven distinct grades, 1 to 7, No. 1 being the poorest, No. 7 the richest. Let us divide the economic life of Ohio, beginning in 1802 and ending—when? into seven generations, with continually increasing population.

Now, according to the view we are considering, generation No. 1, the first settlers, will take up lands No. 1, the poorest of all; generation No. 2 will take up lands No. 2, the next to the poorest; generation No. 3 will take up lands No. 3, and so on.

This, or something very like it, must take place, or our "law" breaks down; for should generation No. 3, say, have the presumption to take up lands No. 6, and generation No. 4 be thereby encouraged to take up lands No. 7, why then generation No. 5 will be compelled to take up lands No. 5, that is, lands poorer than those which had been brought in by the two generations preceding, while generation No. 6 will be driven to take up lands No. 4, far down on the scale of fertility; and generation No. 7, the flower of civilization, will actually have to "decline upon" lands No. 3, which, according to Mr. Carey, generation No. 3 should, in conscience, have taken up. In other words, we should have cultivation driven down to inferior soils, a state of things respecting which Ricardo's critic declares that it not only never has existed in any country whatsoever, but that it is contrary to the nature of things that it should have existed or can exist.

In view of such possible results, what an appalling responsibility rests upon the people of any generation in the matter of not taking up any better land than they ought! In the first place, think what a degree of virtue it requires, that they should deliberately deny themselves the enjoyment of the really best land around them, in order that the coming generations, with increasing numbers, should have the privilege of first occupying these, as Mr. Carey says they must do! Even more remarkable than this, think of the degree of intelligence that is required to point out to the men of any generation just the share of the lands of the State which Mr. Carey's theory will permit them to occupy, they being necessarily ignorant as to what the future population of the State is to be, or through how many generations or centuries the increase of population upon the territory is to be continued!

491. But let us return to Ohio. We have seen what is required to make this "historical law" true. How far do

^{*}A distinguished agricultural chemist of Great Britain, author of "Notes on North America."

the probabilities of the case favor the application of that law throughout the settlement of that State?

We may believe that there were, in Ohio, in 1832, when the population was 1,000,000, about 4,000,000 acres of improved land in farms. By 1850, when the population had risen to 2,000,000, these 4,000,000 acres had become 10,000,000. Did the addition thus made to the inclosed and improved lands of the State include a fair proportion of the best lands within its limits, or were the new lands, also, thin, dry, sandy soils, only not quite so poor as those brought in between 1802 and 1832,—soils giving little root to grasses or to grain, but raising a small crop easily and quickly? Unless the latter was the case, this great historical law becomes little better than arrant nonsense.

There is a popular belief throughout the Eastern States of this Union, that, in the eighteen years covered by this period, — 1832-50,—there was an immense amount of "clearing" done in Ohio; and the virtues of the "pioneer's ax" have been celebrated in song and story. Is this all a mistake? Or, if the people of Ohio really did cut down the primeval timber over thousands of square miles, did they, as they ought, take pains to cut down only timber which grew over comparatively poor soils, so as not to interfere with the rights vested in unborn generations by Mr. Carey's "law"?

Between 1850 and 1880, again, the population of Ohio increased to 3,000,000, and the number of acres of improved lands rose to 18,000,000. Were the 8,000,000 acres improved for the first time during this period, all, or substantially all, of a quality next above those previously brought in, but still below the best? Did this added territory embrace lands only a little less thin, a little less shallow, than those occupied in 1850? Did this vast annexation still leave the really good lands of the State uncultivated, only to be improved when the population shall reach 5,000,000 or 10,000,000?

492. I do not care to contest Mr. Carey's assertion that the first generation of settlers in any American State have spread themselves loosely over the soil, picking out the spots which offered the greatest facilities for the transportation of produce

and for communication with the older settlements, perhaps giving a certain preference to naturally cleared, self-drained land. But that the second generation, in any American State, north of Mason and Dixon's line at least, have shrunk from the real problem of their economic life, have failed to grapple with the obstacles which withstood their acquisition of the richest resources of nature, have neglected to subdue the soil, the best soil they could find, with ax and spade, strenuously, manfully, with incessant toil, with unflinching courage, I, for one, do not believe; and Mr. Carey has not adduced a scintilla of evidence to prove a proposition so contrary to all we have ever learned of the character and life of the Western people. In the absence of any such statistical demonstration, common fame and common sense give the flattest contradiction to this hypothesis.

With this we may safely leave the argument against the Ricardian doctrine of rent. The person who denies the truth of the Ricardian law in effect declares that men habitually rent or sell highly fertile and comparatively infertile fields, rich corn lands and mountain pastures, at the same price; that men habitually rent or sell lands near a market at the same price with lands the most distant from the market. If he does not mean to assert this, he does not in the smallest degree traverse the path of Ricardo's argument. If he does mean to assert this, he puts himself on the level of the person who should assert that men habitually sell two bushels or ten bushels of wheat, indifferently, at one and the same price.

X.

THE NATIONALIZATION OF THE LAND.

493. The Law of Rent Re-stated.—We have seen what is the nature of Rent. It represents the surplus of the produce over the cost of cultivation on the poorest lands actually contributing to the supply of the market at the time.

We saw (par. 262-4) that, conceding the private owner-