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OBSERVATIONS

ON THE

BENEFITS ARISING FROM THE CULTIVATION OF POOR SOILS;

BY THE APPLICATION OF PAUPER LABOUR;

AS EXEMPLIFIED

IN THE COLONIES FOR THE INDIGENT, AND FOR ORPHANS IN HOLLAND:

BY

W. JACOB, Esq. F.R.S.

PRINTED FOR THE SOCIETY FOR IMPROVING THE CONDITION OF THE LOWER ORDER OF TENANCY, AND OF THE LABOURING POPULATION OF IRELAND,

By Charles Greene, Printer, at the Schools of Industry, Lindfield, Sussex.

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PREFACE.

In this, as in every country, there are to be found great numbers with sufficient strength to labour, and with dispositions to procure their own subsistence, who are reduced to indigence for want of employment.

There are also a great number of offenders against the laws, and, of late years, among the rising generation they appear to have greatly increased.

These are evils which demand the humane consideration, and efficient assistance, of the well-disposed portion of the community.

Under this impression, a society has been instituted, whose attention will be directed to these two objects.

The knowledge of the attempts made in the neighbour kingdom of the Netherlands, and the examination of the steps pursued with success in that country, has induced the Society to print, for general circulation, the following observations taken from a volume of tracts on subjects relating to the corn laws and corn trade, by Wm. Jacob, Esq. one of their members.

The views of the Society are mainly practical. They look for improvement in the condition of the more indigent classes, and for the preservation of the rising portion of them from the corrupting influence of indolence and ignorance,—rather to what has been actually effected, than to any such abstract and theoretic projects as have never been reduced to the test of fair experiment. It is in the design of the Society to commence its operations by encouraging
attempts upon a scale of competent extent, for the purpose of improving the less fertile lands of this kingdom, by the application to them of that labour which is at present either useless or injurious to the community.

Thus far they mean to adopt the views of the Benevolent Society formed in Holland; but, though adhering to them as an outline, they are too well acquainted with the variations in local circumstances not to be sensible that in filling out the plans, they must be guided by the peculiarities of the district in which the operations are to be conducted. That project which might succeed in Holland, or in one part of England or of Ireland, might fail in another part from differences of soil, of climate, of vicinity to roads, rivers, or canals, or from the character and habits of the labouring population.

As the state of Ireland calls for more immediate attention, that part of the empire will be the first object to which the Society will direct its attempts. There the greatest surplus of unemployed labour is to be found, and a great portion of that description of land, which by the application of such labour, may be the soonest made capable of maintaining in comfort, the families who shall have been occupied in improving it.

If, however, as there are good grounds to anticipate, the support the Society may receive shall be fully adequate to the purpose, it is contemplated to carry on the plan simultaneously in some part or parts of England.

The Society holds out no view of personal benefit to any of its individual members. It is not a Joint Stock Company, whose profits are to be distributed among shareholders; but whatever accumulation may arise from the amelioration of the poor soils, will be applied exclusively to the same philanthropic purposes for which the Society has been formed.

A committee is diligently occupied in framing the details of the rules by which the Society is to be governed, in determining on the specific purposes to which its operations are to be directed, and in estimating the expenses to which it will be liable, and the means of meeting those expenses.
The result of their consideration when matured, will be submitted to the Society for its approval; and ultimately to the public for its sanction and co-operation. In the mean time, any information or suggestion, or even hints, will receive most respectful attention, if addressed to William Jacob, Esq. Comptroller of Corn Returns, London; and subscriptions will be received by John Abel Smith, Esq. London, (the Treasurer,) and by any members of the Committee.
OBSERVATIONS,

In no country of Europe does there exist, not even in England, a greater diversity of classes in society than in Holland. In no country, except England, is to be found a proportion of disposable capital so large, when compared with its extent and population; and in scarcely any does that part of the soil, which is utterly destitute of cultivation, form a more extensive portion of the whole surface. The characteristics of the inhabitants are industry, cleanliness, economy, and local patriotism. It would be difficult to trace accurately the steps which have led to, and more so, from the combinations of circumstances here noticed, to have predicted the singular fact; that in that country the proportion of those who draw their means of subsistence from the capital and labour of the community, is much larger than in any other division of the European commonwealth.*

The poor have been constantly pressing on the communal resources, and with increased force, since, by the union of the ancient Austrian provinces with the Dutch in the kingdom of the Netherlands, the freest and best of all the continental governments has been formed. The public attention having been intensely examining into remedies

*In the year 1821, the whole population of the kingdom was 5,715,347, according to Smits, the Secretary de la Commission Statistique. In that year, the number of the poor is stated by Kirckhoff, from official authority, in his Mémoire sur les Colonies de Beinfaise, to have been 753,218, secourus par la charité publique. Baron Malchus states the proportion of the poor to the whole population in this and some other countries thus:—Netherlands as 14; Berlin, 10; England, 9; Vienna, 10; France, 8½; Prussia, 6½ out of every 100, but does not give his authorities. See "Statistik und Staatenkunde," published at Stuttgart, 1826.
for this alarming evil, seems to have been directed, by the practical wisdom inherent in the nation, to have recourse to such means of relief as were to be found within their own territory. The unemployed poor and the uncultivated heaths presented objects, which, when brought into due combination, might be made available to the public, by offering employment to the former, and by fertilising the latter. The bringing very poor uncultivated land into a highly productive state has been rarely found beneficial when undertaken by individual capitalists. A variety of causes may be shewn to account for this. The necessary heavy expenditure for a series of years, whilst interest is accumulating in a compound ratio, and no returns are received; the difficulty and the cost of agents to superintend, with due minuteness, all the details of expenses and operations; the distance from the most beneficial markets, and the relative expense of conveying to them the products in small parcels; these, and other local causes, have often involved improvers of poor soils in embarrassments, which have induced them to abandon their undertakings a long time before they could ever repay them for their expenses and anxiety. On the other hand, every man who has been far from home, must have observed, on every barren heath, some spots surrounding cottages which exhibit marks of productiveness, forming a striking contrast with the sterility that surrounds them. If inquiry has been made, it has been found that, at one period, all was alike barren, —that the difference has been created solely by the application of human labour. If the inquiry be pursued, and the history of the process be studied, it will be commonly found, that the labour which has achieved this amelioration has been principally that, which would have been either lost to the community or applied to its injury.

There are few tracts of barren land, even in this island, which do not exhibit some specimens of what may be done by industry and economy, combined with perseverance, in promoting the comfort of the poor and improving the condition of the soil. On the continent, the specimens are more numerous and the contrast more striking. In both countries, those who are sober, careful, and industrious, may become prosperous, without much or very rigid superintendence, or
when fully imbued with those qualities, will do best when freed from all superintendence. Unfortunately, however, it is found that the greater number of those who are destitute of employment, cannot be safely left to their own spontaneous exertions. They must be stimulated by the constant exercise of immediate hopes and fears; they have not acquired the practice of looking forward to rewards for their labours, which can only reach them at the termination of months, or perhaps years. They have commonly found the solicitude about each day's supply of necessaries sufficient for itself, and have left for to-morrow the cares of to-morrow.

Besides the numbers thus destitute of employment who are capable of labour, there are, in proportion to the whole number of the indigent in every country, orphans of both sexes, barely arrived at the age of labour, or, at least, of heavy labour, who ought to be supplied with the necessaries of life. These should be inured to early habits of industry, and ought to have that portion of learning which suits their station, and the religious and moral instruction which suits all stations, imparted to them from the funds of the whole community. These two latter classes will require constant and active superintendence. The rules for the regulation of their period of work; for the nature of the work; for the rewards or privations consequent on exertion or neglect; for the food, clothing, dwellings, and implements, all require to be soberly and practically framed, and enforced by a strictness of superintendence nearly approaching to the rigidity of military discipline.

These views of the subject naturally point to the result of the experiments made in Holland, and, indeed, in some other parts of the kingdom of the Netherlands. The only establishments that encourage perseverance by the success that have thus far attended them, are those composed of public bodies voluntarily formed, such as the "Beneficent Society," which commenced in the early part of the year 1818, to lay the foundation of its benevolent and economical operations. By joint, small contributions of numerous individuals, sufficient capital was collected to commence their labours, which have been prosecuted, up to the present time, with increased extent,
and exhibit cheering prospects of still further extension. In all of these, a rigid system of superintendence was at first introduced, which has been gradually relaxed towards those individuals alone, who have shown, by their manner of conducting themselves, that they have acquired and practised such habits of industry, economy, and order, as in the judgment of the superintendency, qualify them to be left to their own spontaneous and unrestricted exertions.

The smaller establishments in the Netherlands have not been quite so successful as that of Frederick's Oord, to which attention has been chiefly invited. It is easier and more necessary to introduce regularity of operation among a large body of people, than a small number. Thus well-disciplined armies, acting upon principles of strict obedience to superiors, and that through all gradations of ranks, are brought, with the simplicity of mechanism, to effect purposes in which they would utterly fail, if attempted without such discipline, order, and regularity.

The cultivation of poor soils is looked at with aversion by many practical men, and among the more theoretic writers has been treated of as an evil which should, at all hazards, be avoided. The latter have not unfrequently expressed their opinions, that all the poor lands now in cultivation in this kingdom, should be suffered to return to their original sterility. In the examination of this topic, which may be made before entering into the details of the management of the Dutch colonies of Beneficence, it is not necessary to involve the reader into that labyrinth of metaphysics and rhetoric which, for a short period, under the name of political economy, enveloped in darkness subjects sufficiently plain to the more laborious inquirers, who worked statistically, and ascertained all the facts of a case before they formed a decisive judgment, or framed any general theory.

In the examination of the advantages to be derived by reclaiming from sterility lands now in a condition in which they yield neither produce nor revenue, or a very minute portion of either, the subject becomes a matter of calculation to which arithmetic rather than logic should be applied. It is that kind of calculation on which, though the exact result, either as to the period when remuneration shall be
received, or the amount of such remuneration cannot be accurately calculated, it is easy to show that the reward must arrive. The life of individuals is so short, and the uncertainty of who may succeed to reap the fruit of their labour so great, that each one may well hesitate before he embarks his capital in an undertaking, whose remuneration, however ultimately probable, or even certain, may be protracted to such a distant period, as to yield it to those in whose prosperity he can feel no interest. The case is different with a community or nation. The acorn deposited in the soil, and which produces the valuable oak, may be of no advantage to the planter or his descendants; but the community, at some period, will be far more than repaid, for the labour which one of its members has expended. This remark may be applied to the cultivation of poor soils, the process of which is somewhat similar.

It cannot be denied that in all soils some organic substances are to be found, which are capable of operating to produce vegetation.——The most bare rocks are in time covered with lichens; they feed some of the smaller animal insect tribes; and, as the rocks become gradually decomposed by the operation of the atmosphere; the animal and vegetable matters become compounded, in a greater or less proportion with the decomposed rock, or, as it is then termed, the soil. A proof of this process might be cited in the species of gramina, which make their first appearance on what are called, though they are not strictly so, barren sands. Without adverting further to the operations of mere nature, it may, however, be affirmed, that every description of soil will produce something that, either mediately or immediately, may be converted into sustenance for man or animals. We may advance another step, and maintain, that by the application of labour, every soil will in time yield more than sufficient for the support of the labourers, whether human or animal, whose exertions are applied to its amelioration, provided the whole exuviae of such labourers be applied in aid of their labour in the form of manure.

A calculation will naturally here arise, as to how long the period will be during which the labour shall exceed the produce, and a comparison may then be instituted, between that period and the more
extended one; extended, perhaps, to the dissolution of all things, during which the produce shall exceed the amount of the labour.

We may illustrate this by adverting to actual practices, very familiar to every man who has bestowed much thought on economic subjects, and has mixed with his reflections some attention to the progress of our own agriculture. In the common rotation of light land husbandry, by which the poorest sandy soils have been rendered fertile, the common course is, turnips, barley, clover, or other artificial grasses, and wheat, or, perhaps, on the continent, rye. The first of these rotations, in common seasons and with common prices, will not defray the expense. There will be a loss of capital to the undertaker if he relinquishes the process at that period; the soil will, however, be somewhat improved. During the next rotation of four years, if a somewhat less portion of manure and labour be applied, equal crops will be obtained; or if the same portion of labour and manure be administered, the result will be heavier crops than after the first rotation. By every rotation, the original soil will continue to be improved, upon the supposition here made that the same quantity of labour and manure are continued. As the produce of the land increases, the portion of manure which it will afford will necessarily increase, and the subsequent fertility be in a constantly-advancing state. As vegetation is compounded of other parts besides the soil, and as these will not increase in power like it, the subsequent advances in fructification will be gradually slower than the first steps. The air, the light, the heat, the rain, are all component parts of vegetation which are not susceptible of increase, but only of a more judicious application. If the same application of labour and manure be furnished through three successive rotations, the production of the third crop may be double that of the first; but, in the sixth rotation, they will not be double that of the third, nor will the twelfth be double that of the sixth. *

* This remark, though known near twenty centuries ago, is one of the discoveries of modern political economy, which "though true, is by no means new," although it has been applauded as such by the initiated, when couched in their technical phraseology, thus, "the ratio of the net produce of the land to its gross produce is, in the progress of improvement in cultivation, continually diminishing."
Without entering into a discussion which sufficient data do not admit, as to the proportionate increase of each rotation, it may be safely assumed, that a time will arrive when patience and perseverance in the course here noticed, must raise the productive power of the soil to such a pitch as may allow annually of an increasing quantity of its produce being spared from the application of it to future cultivation. The same observations may, be extended to poor soils of other descriptions; to cold clays, to peat mosses, to bogs, and, in short, to all land now unproductive. The rotation may be of more years; the progress may be more slow; and the process demand longer term of the labour of men and animals, before the production shall exceed the consumption. However long the period may be, it must be but short when compared with that subsequent period in which, by the perseverance that first obtained fertility, the production shall surpass the consumption.

In the progress of amelioration the poorest soils may be viewed as machines, in whose construction some advances have been made, whose operations are not yet perfected, but which, by additional improvements, are certain to effect the purpose for which those operations are designed. They differ, however, from such machines in most important respects; the more they are worked, the more efficient do they become, and the less repairs do they require. In stating that such earthy machines are certain to effect the intended purpose, certainty is not meant to be applied to the individuals who execute the machinery, but to the whole community, of which they form, perhaps but a small portion.

The ill success that has frequently attended the efforts of individuals to ameliorate poor soils has very naturally checked the ardour which would have otherwise led to such undertakings. If the cases of such unsuccessful operations be examined with attention, they will be found more frequently to have been occasioned by their having been undertaken under momentary impulse and sanguine excitement, than from any clear and well arranged previous calculation. When, in the course of the fluctuations which have been witnessed of late years, the prices of agricultural produce have ranged excessively high,
and, especially, when such prices have continued advancing for a series of years, a degree of enthusiasm has been directed towards agricultural pursuits. Persons have embarked in them with little practical experience; capital has been directed to them that was before moderately profitable in other modes of employment, and land has been brought under cultivation which the proprietors of it had never before supposed would repay them. In such times of excitement, all the necessary expenses of cultivation have partaken of the high prices of produce. Working cattle, human labour, manure, seeds, and even the implements of husbandry, have been enhanced in their cost. Those who entered on such operations, being commonly of a sanguine temperament, instead of marching with the slow pace with which nature proceeds, hastened with rapidity to extract from the soil some portion of the wealth they had buried in its bosom. In such a course, the amount of the first outlay was overlooked in the firm expectation that it would soon be returned with ample reward. A few years or even a single year of superabundant productiveness, may have changed the prospect; produce falling in price, cattle losing a great part of their value, labourers offering their services for lower wages, alarm the improver and terrify him from proceeding. Under such circumstances many an operation has been suspended, which, by perseverance, might have become beneficial, if not equal to the original expectations, at least more beneficial than a total abandonment.

If such a course of proceeding as is here described had been dictated, not by temporary excitement, but by sober calculation, it would not have commenced at a period when prices of produce and of all connected with it ranged very high, but when they were in that medium state which gives the best assurance of durability. It would not have been abandoned when prices had sunk beneath their medium level; and thus extreme losses on both sides would have been either escaped or lessened.

It is scarcely to be expected that the operation of cultivating the poorer soils should be undertaken from the mere desire of personal gain, when the discouragements which have in many cases opposed
themselves to its success are duly considered. The chief points on which success must depend are patience and perseverance, neither of which are the most common attendants on the eager aspirants after individual profit. A community acting with unity and firmness, excited by some common principles, imbued with benevolence and patriotism, and placing themselves under a superintending body selected for their practical knowledge, their prudent judgment, their strict economy and unspotted integrity, may conduct such operations as are here suggested with the prospect of certain ultimate success. They may look forward with confidence to a period when their labours and anxieties will be rewarded by the enjoyments they will confer on numbers who, but for their exertions, might have pined in misery or have perished in want.

The practicability of achieving the object of bringing our worst lands to a degree of highly productive cultivation, and with enduring profit, after a course of years of perseverance, may be inferred from what has been performed in other countries at no great distance from our own. In the Netherlands, the district called Waesland, between Ghent and Antwerp, is a mere agricultural country. It is better peopled, better cultivated, and more productive than any other spot in Europe of similar extent. It was, in the time of the civil wars in Flanders, a mere sandy heath, without inhabitants, without cultivation, and without live-stock. The change has been effected by persevering labour through many generations; and the results of that labour are most strikingly exhibited in the fruitful fields, the beautiful cattle, the healthful and cleanly population, the comfortable residences, and all the other visible marks of rural prosperity.

Another division of that country, the Campine of Brabant, situated between Maestricht, Breda, and Antwerp, was formerly a most barren heath. It is now chiefly cultivated; but sufficient portions of it are still left to show what was its pristine condition. These, as well as most other portions of the more productive parts of the Netherlands, have, in the course of many generations, been brought to their actual high state by the perseverance of the ecclesiastical communities, who were formerly the great landed proprietors, and the great promoters of rural civilization in Europe.
The Abbé Mann, an Englishman by origin, who was a member of one of the religious communities in Flanders, writing in 1795, gives the following account of this district:—

"It is well known that the Campine of Brabant, which is the northern part of that province, consisted originally of sand, covered with heath, interspersed with lakes and extensive marshes, and here and there with woods of fir. Tradition reports it to have been once a part of the sea. To this day, where cultivation has not extended, the soil of itself produces nothing but heath and fir; the sand is of the most barren and harsh kind, nor can it be rendered fertile but by continued manuring. As the property of this ground may be acquired for a mere trifle, many have been the attempts of private persons to bring tracts of it into cultivation; every means have been tried for that purpose, and government has given every possible encouragement to it. But I have not yet heard of any one, however considerable might be his fortune, that has succeeded in it, and many have been ruined by the project.

What is cultivated in the Campine, is owing to the religious houses established in it, especially to the two great Abbeys of Tongerloo and Everbode. Their uninterrupted duration for five or six hundred years past, and their indefatigable industry, have conquered those barren harsh sands, and rendered many parts of them highly productive. The method they follow is simple and uniform; they never undertake to cultivate more of this barren soil at a time, than they have sufficient manure for, seldom more than five or six bunders* in a year; and when it is brought by labour and manuring into a state capable of producing sufficient for a family to live on, it is let out to farmers on very easy terms, after having built them comfortable habitations. By these means many extensive tracts of the Campine are well cultivated and covered with villages, well built houses and churches. The Abbey of Tongerloo alone furnishes about seventy of its members as curates to these parishes, all of whom owe their existence to that original stock. I may here add, and that from the

* The bunder is a local measure in the Low Countries; it varies in different parts, but in Brabant it contains nearly two and a half English statute acres.
undoubted testimony of the historians of the Netherlands, that the cultivation of these rich provinces took its rise from the self-same means, eight hundred or a thousand years back, when they were in a manner one continued forest."

The influence of communities, also ecclesiastical, has operated most beneficially in increasing the productiveness of our own soil. We were not so densely peopled, at the period of the civil wars in Flanders, as that country. It had felt the powerful effect of commerce and manufactures to stimulate rural improvement, long before any such excitements had produced great effect in this kingdom. At that early period, when the monks of Glastonbury, of Thorney, and of Crowland, rescued the prolific plains of Sedgemore, or the rich levels of Lincolnshire, from their unproductive state, by drains and embankments, the people of England required meat rather than bread. Breeding, and feeding land, were more in request than arable fields. The ecclesiastical communities employed their labourers and their savings, rather in calling into existence land immersed in water, than in converting barren heaths into corn-bearing fields. The valuable improvements made by those communities have continued to enrich this country long after they had fallen before the rapacious Henry, under the charge of voluptuousness, but under the real crime of enormous wealth.

Communities, whether ecclesiastical, civil, or even benevolent, are subject to evils which make them efficient for the purpose here under consideration, only to a limited extent. They commonly degenerate in time. Individual interests are created in them, which interfere with, or diminish the good effects of the general interest. Even in charitable bodies of long standing, we may too often trace inroads on the funds of the institutions, for the sake of the patronage acquired by some of its members, and the pecuniary emolument extracted by others. But, if such communities could be maintained in all the original purity which attended the freshness of their foundation; if the ardent benevolence that founded them could be kept up with equally intense heat, they would still be less useful as instruments of rural improvement, than the feeling of individual interest, when stimulated
by the hope of independence, and encouraged by the progress made at each step of advancement, towards such independence. The monks of Flanders were induced by this conviction, to establish families on farms, as soon as they could be made ready for their reception, and hence, as will hereafter be seen, the Benevolent Society of the Hague have placed the little farms at Fredericks Oord, in the hands of such individuals as have evinced, by their conduct, that they are able and prepared to proceed in the course pointed out, with fair prospect of personal benefit.

It seems clear that, up to a certain extent, an extent which only actual experience can determine, and that in each individual instance, the best mode of ameliorating the poor soils is by the powers of a joint stock company, or community, possessing sufficient funds to defray the first expenditure, sufficient power to enforce order and regularity, and sufficient activity and watchfulness to superintend the actual administration. Beyond certain limits, the exertions of each individual will be the best security for the ultimate success of the great operation. Attention bestowed on the labour and habits of thought and sobriety of the labourers will direct those who superintend them to such persons as are first fittest to be trusted to their own discretion; and the practical exercise of such attention will be a far better guide to the judgment of the superintendents, than any previous rules that can be laid down.

We have only been hitherto considering the cultivation of our poor lands, in the narrow view of the pecuniary benefit to be derived from the operation either by the communities or societies with whom it may originate, or to be obtained by the nation viewed as one body. There is, however, a higher and far more important view, which remains to be taken of such proceedings. The numbers of our indigent fellow-subjects, and the striking augmentation of juvenile criminality, imperiously call on every friend of his country, and of humanity, for attention and regard. It is obedience to that call which has dictated these sheets, and which will occasion their being submitted to the examination of the public. If pecuniary advantage alone could be proposed by cultivating the poorest of our soils, it
CULTIVATION OF POOR SOILS.

would be an inviting object of attraction, but it is impossible to believe, that if no such benefit was proposed, but merely a plan submitted which promised to lessen the misery of our adult fellow creatures, by furnishing them with subsistence in exchange for their labour, and which, by appropriate education, combined with the formation of habits of industry, economy, and subordination, could be made available to improve the moral condition of the rising indigent population, it should fail of receiving active support in this kingdom.

If the weight of pauperism could not be wholly removed, if it should be made apparent that only an alleviation of that weight could be administered, and that be accompanied by a diminution in the amount of the parochial assessments, it would be deserving of extensive patronage and assistance.

As examples in practical economics are the best proof of the merit they claim, as they speak plainer and more forcibly than any abstract discussion, we may proceed to take a view of what has been already performed by our sagacious, indefatigable, economical, and charitable neighbours in the Netherlands, to lessen the weight of pauperism, and improve the moral habits of the juvenile portion of it. In various parts of the kingdom, establishments had been formed for the relief of the poor by furnishing them with employment in reclaiming waste lands: they were mostly on a small scale, but, as far as they have proceeded, have been found beneficial. They can, however, none of them be considered so fair a trial of the experiment, as the Colony founded at Frederick’s Oord, and therefore the chief attention will be directed to that large establishment.

This institution is indebted for its origin, as well as for the successful progress it has hitherto made, to the penetration, ardour, and indefatigable benevolence of General Van den Bosch. He had served in the East Indies and passed much of his time in the island of Java; he purchased an estate there, and entered with zeal into plans of agriculture. By accident, a number of Chinese emigrants under a Mandarin of the fourth class, named Tjan-hoeck, an experienced cultivator, settled near him. The general soon observed
that however carefully he might cultivate, the crops of his Chinese
neighbour uniformly exceeded his own, and he was induced to form
a connexion with him, which proved highly beneficial; as when he
returned to Europe, he was enabled to sell his estate for 150,000 rix-
dollars which had originally cost him but 25,000.

The experiments and processes of the Mandarin, after much revi-
sion and examination, have been first made known in Europe* by the
general; and, as far as the difference of circumstances justified, have
been subsequently introduced into practice in the colony of Fred-
rick's Oord.

The king of the Netherlands, with that active intelligence, the
constant exercise of which for the prosperity of his dominions, has
secured for him the respect and attachment of his people, was occu-
pied in 1817 with an extensive plan for bringing into productive cul-
tivation an extensive district of waste heath between Maestricht and
Breda. His attention was drawn to the communication of General
Van den Bosch, and his patronage was extended to the infant project.
A public meeting was held at the Hague, in the beginning of 1818,
when the Society of Beneficence was formed.

The constitution of the Society was deliberated upon, and fixed in
the following manner: Two committees are appointed for the admin-
istration of its affairs. The first of them, styled the Committee of
Beneficence, consists of a president chosen for life, Prince Frederick,
the king's second son, of two assessors or assistants to the president
chosen annually, but always re-eligible, and of nine other members,
one of whom performs the duties of secretary.

This committee is divided into four sub-committees, one of which
superintends the finances, the second instruction, the third the cor-
respondence, and the fourth general purposes. One assessor is pre-

* He first published a work in Dutch, entitled "Verhandeling des General
Major Van den Bosch, over de mogelykheid de beste wijze van uitvoering en be-
langrijke voordeelen eenen algemeenen armen-inrichting in 't Rijk der Nederlanden,"
or a treatise by Major General Van den Bosch on the practicability of instituting in
the most advantageous manner a general pauper establishment in the kingdom of
the Netherlands.
sident of the second, the other of the fourth of the sub-committees, the two others choose their own president. When the Committee of Beneficence is not assembled, its duties are executed by a committee composed of members whose constant attendance may be depended on, called the permanent committee.

The assessors are made personally responsible, the first of them that nothing contrary to the laws of the society be allowed to be inserted in the orders of the committee, and the second of them, that, in the execution of the orders, (which is exclusively entrusted to him) the funds of the society are not to be allowed to be applied to any other purposes than those for which they are specifically appointed. Each year one member of this Committee of Beneficence goes out, but may be re-chosen.

The second Committee, called the "Commission de surveillance," consists of twenty-four members, chosen annually, and re-eligible, who select their own president and secretary. The former office is filled by the Prince of Orange. Its duties and powers are to examine and audit the annual accounts, to watch over the expenditure, and the plans and operations undertaken by the society, or entered upon to assist indigence, to relieve from its responsibility those who have performed their duty, and, where necessary, to order prosecutions against such as may have failed in the performance of it.

No laws can be made or changed but such as are adopted by these committees, and approved by a majority of the members of the society, at a general meeting.

When the laws of the society had received the sanction of the king, a public communication was made, and the governors of provinces, with the military and civil heads of departments, and other local authorities, were invited to aid the institution, by becoming members of it, with the addition of all other benevolent persons who were disposed to do so. By this means, more than 20,000 individuals were added to the Society, and subscriptions collected amounting to upwards of 70,000 florins or guilders, (£830. sterling).
Local sub-committees were established in the cities, as well as in the rural districts. In the first, they were composed of two members of the regency, or corporation, of two clergymen of the different religious sects; and two of the most distinguished voluntary members of the society. In the latter, they consisted of the chief magistrate of the division, of one clergyman, and one member of the society. They were to receive contributions, and to watch over the interests of their own commune in the distribution of the funds of the society.

An account is open with the Bank of the Pays-Bas, into which the general and local committees pay all sums; all payments are made by the permanent committee, in the note for which is written the name of the person to whom it is to be paid, the purpose for which, and the order by which it is authorised. To simplify this part of the business, all the heads of expenses have been fixed, and can in no case be exceeded.

The society, after being constituted, and satisfied that the funds at their disposal would be sufficient to warrant their proceeding with the experiment they have projected, purchased the estate of Westerbech Sloot, near the town of Steenwyk, on the confines of the three provinces of Friesland, Overyssel, and Drenthe. The estate comprehended about six hundred arpents or morgens,* between twelve and thirteen hundred acres of heath land, about one-sixth of which had been converted into fields, or was covered with some bad wood.—This estate cost 56,000 florins or guilders, or about 4660£ sterling.

A small stream, the Aa, which runs through it, was made navigable for boats; buildings for a store, a school, a spinning house, and as dwellings for fifty-two families, consisting of from six to eight individuals in each, were speedily erected. The communes sent some indigent families to occupy the houses, who ceased from that time to be a burden on them. All these operations were commenced early in September 1818, and on the 10th of November following, the colonists entered upon their new habitations.

* The Dutch morgen is somewhat more than two English statute acres; 4.978 are equal to ten English acres. The Dutch guilder or florin, at the general rate of exchange, is worth one-twelfth part of a pound sterling, or 20d.
CULTIVATION OF POOR SOILS.

As a specimen of the economy of this truly philanthropic society, it might not be amiss to begin by noticing the maximum at which, after much examination, the outfit of each family, consisting of from six to eight individuals, was fixed, and the estimate of the cost of each separate article.

<table>
<thead>
<tr>
<th>Description</th>
<th>Guilders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building each house</td>
<td>500</td>
</tr>
<tr>
<td>Furniture and implements of husbandry</td>
<td>100</td>
</tr>
<tr>
<td>Clothing</td>
<td>150</td>
</tr>
<tr>
<td>Two cows, or one cow and ten sheep</td>
<td>150</td>
</tr>
<tr>
<td>Putting the land into cultivation &amp; seed for the first year</td>
<td>400</td>
</tr>
<tr>
<td>Advances in provisions for the first year</td>
<td>50</td>
</tr>
<tr>
<td>Advances of other kinds</td>
<td>50</td>
</tr>
<tr>
<td>Flax and wool to be spun</td>
<td>500</td>
</tr>
<tr>
<td>Seven acres of uncultivated land</td>
<td>100</td>
</tr>
</tbody>
</table>

Total: 1700 or 14l. 13s. 11d.

As three families contain twenty individuals, two of them consisting of six persons each, mostly at maturity, and one of eight persons, six of whom are youths, from six years old upwards, the expense of outfit for each person amounts to 22l. 6s. 7d., which, as hereafter will be shown, is expected to be reimbursed to the society in sixteen years, by the rent to be received from the colonists, and by the labour they afford in its service.

This is, however, anticipating what will presently be at more length discussed. This calculation of the outfit was made before Frederick's Oord was begun to be settled. That it was judiciously made is best proved by the fact, that the society have been enabled to form contracts for the building of many of the houses, at a sum nearer to four than to five hundred guilders. Some other of the items have cost less than the estimate; thus a saving is now effected at the rate of 2½ per cent on the 400 guilders allowed for putting the land into cultivation, and in no case, by the fundamental laws, can any exceeding of the estimate be paid. The house, barn and stalls are under the same roof, the whole range being about fifty feet in depth. The
front is toward the road, about sixteen feet in length, which forms the dwelling, containing one room, about fifteen feet square, some small sleeping closets behind it, and a place above in the roof for keeping the tools and stores belonging to the family. The barn and stalls comprehend a space about twenty-four feet square, and behind it is the privy, and the reservoir for preserving whatever may be converted into manure, such as water that has been used for washing or cooking, and what runs from the stalls, which is conducted to it by drains. The foundation of these buildings is of brick, as are the walls of the dwelling part. The barns and stalls are boarded and tarred, and the whole is covered with a roof of reeds.* As the labour of building those places is performed by the colonists at the rate fixed, the cost of bricks made from clay, and burnt with turf, both found on the land, does not amount to more than ten shillings the thousand. Lime is made on the estate from sea shells, which are brought from the shore of the Zuider Sea, and burnt in field kilns, in a simple and elsewhere unpractised mode. This economy in the rate of building must have been applied to every other head of disbursements, and to all the operations of the society, or so much as has been done in a few years could not have been effected.

The projected views of the society lead them to estimate, that this sum of 1700 guilders, or 141 l. 13s., will be repaid to it in sixteen years by the colonists; whilst the annual rent with which they are charged will be equal to the interest. This rests upon the plain calculation that the annual value of the proceeds of the labour of six persons beyond the value of the produce on which they subsist, will amount to thirty shillings per year, or, to carry it still further, that the produce of the labour of each of the individuals will exceed their subsistence about five shillings per year; or, at the rate of less than one penny and one farthing per week.

* By recent calculations it has been ascertained that it is really better to use only bricks for the barns, and tiles instead of rushes for the roofs: and in the buildings that mode will be hereafter adopted.
CULTIVATION OF POOR SOILS.

The first principle of the society is, that no colonist shall ever be, even for the shortest period, unemployed. With this view, the population is divided and subdivided into bodies who work under the inspection of different ranks of officers with military precision. A superior director, at first General Van den Bosch, superintended the whole establishment. A sub-director presides over one hundred families. These are again divided into twenty-four families, over whom a quarter-master is appointed. The quarter is formed into two divisions, at the head of each of which is a section-master, a practical man, who is the example and the instructor of those under his command, in the necessary work which they are destined to perform.—

Thus the whole mechanism resembles that of an army divided into sections, companies, battalions, and brigades. In fact, most of the sub-directors and quarter-masters are officers belonging to the 6th infantry regiment. Military men, when properly qualified, seem the best adapted to execute duties which require implicit obedience towards superiors, and firmness in the enforcement of attention and submission on those under their command. The labourers are summoned to their work at an early hour,* the roll is called over, and they are led to their various occupations. Their occupations are distributed according to the plan of the chief director, who gives out his general orders. At first a proportion of the men work at making bricks, preparing lime and timber, and building the small barns and dwellings; but the greater portion is employed in field labour. The chief, almost the only implements, are the spade and the hoe, and though the artisans and handicraftsmen from cities and towns are at first awkward in the use of such implements, with a few days to instruct them, and active examples to incite them, they soon become sufficiently expert. Every kind of labour is performed by the piece, nothing by the day. At the end of each day's labour the workman

* At five in summer, and at six in winter, the colonists are summoned by a bell to rise. An hour is allowed for their domestic purposes, when at the second bell they must assemble before the door of the quarter-master, and when they have answered to their names, be led by the section-master to their work. He who does not answer to his name is entitled to no wages for that day.
receives a card specifying the amount of his earnings, for which he may procure, at the public store, food for his support, in stipulated quantities, at fixed prices. If, at first, his earnings fall short of his wants, credit is given him, which is discharged as his future earnings increase. Such cards circulate freely within the colony, at their money value. The female parts of the community are also constantly employed in spinning or weaving; and the wool and flax used in those occupations are furnished by the society, at first from purchases, but, as the colony advances, from their own sheep and flax fields. They, like the men, are paid by cards. The attraction of personal gain, with the constant application of the stimulus arising from rigid inspection, have been found in most instances quite sufficient to insure industry, without the frequent recourse to personal punishment for idleness.

As in such a community there must be always a portion who, from sickness, old age, or other circumstances, are incapable of performing their due share of the work, one day and a half in each week is allotted to the other colonists to work for them, and for this they are remunerated at the rate of 8d. per day in winter, 10d. in spring, and 1s. in summer.

The mode of keeping the accounts is simple, and such as to satisfy the colonists that strict justice is executed towards them. Each household has a note book, in which all the transactions of the several members of the family are entered, and these are checked every week by comparing them with the books of the society at their storehouse.

As in well regulated regiments, the subaltern and non-commissioned officers examine the knapsacks, accoutrements, and arms of the men under their command, so do the sub-directors, quarter-masters, and heads of divisions inspect, at short periods, the state of the tools, implements, cattle, furniture, and cloathing of each household, when those who have injured any of them, or have lost or destroyed any part, are charged with the expense of replacing them. The same rigid examination is applied to each portion of the agricultural operations of the several households, especially to the careful preservation
and regulated mode of managing whatever substances can be made of use to cultivation in the shape of manure. In this branch of attention to the preservation, management, and application of manure, the practices of the Chinese have been as closely followed as the difference of climate, soil, and productions will admit. The rules are minute and precise, and as it is on the due administration of this part of the agricultural operations, that the success of the society, as well as of the individual colonists must depend, they are adhered to and enforced in a way, and to an extent, that leave nothing to private caprice or to ancient prejudice.

Although it is not the design of these observations to enter into all the details of the husbandry as practised at Frederick's Oord, yet the providing and managing the manure, as the foundation on which its maintenance is built, may deserve some degree of attention.

When the house and barn are built, the soil formed by mixing sand and clay, to a consistence which makes it sufficiently retentive of moisture, the land manured, dug, and one crop sowed or planted on it, then a family, consisting of from six to eight persons, is fixed on it at an expense, as before stated, of 14l. 13s. To enable this household to subsist, to pay the rent, and to save something, it is necessary that very intense manuring must be persevered in. The directors, therefore, require, and by their enforcement of the prescribed regulations, indeed, compel each family to provide sufficient manure to dress the whole of the land every year. For this purpose each household must provide itself with 300 fodder of manure, yearly; or, in English terms, 150 tons, or at the rate of more than 20 tons to each acre. When it is considered that few of our best English farmers can apply one half that quantity of manure, it will not appear wonderful that seven acres should be made to provide for the sustenance of the same number of persons and leave a surplus to pay rent and to form a reserve of savings. The minimum quantity to be provided by each household is 25 fodder every month, but attempts are making to raise it up to 30 fodder monthly. It has been stated in the rate of outfit, that on each farm the live stock consists
of two cows, or one cow and ten sheep, to which may be added pigs, in number corresponding to the progress which the family may have made towards prosperity. The excrement from such a small number of animals, added to that from six or eight human beings, however carefully every particle might be preserved, would not nearly enable the cultivator to manure his small portion of land once even in four or five years.

It hence becomes necessary to form masses of compost, the collecting the materials for which, forms the greater part of the employment of the colonists. They are created almost wholly by manual labour, of that kind, which, but for such an application of it, would be wholly lost to the community. As straw is at best, in the early period not abundant, and as that from the corn must at first be chiefly used as food for the cattle, or for covering to the houses; other materials, which the heaths abundantly furnish, are resorted to in order to make beds for the cattle. The heath land is pared, but the operation is to cut with the spade a very thin slice of the earth, and not to the bottom of the roots of the plants, that they may, as they soon will do, shoot again; the parings are not only made thin, but in narrow strips or small spots. Thus but little soil is taken away, and the roots, though cut, are not all of them destroyed; the parts that are left bare, are protected from being too much dried up by the sun and wind, and the seed of the ripe heather is scattered over the spaces left bare near them, and soon bring forth the same plants.—By this operation there is a constant succession provided of heathy material.

This paring for the heath is a joint operation performed by the men in a kind of military lines. The society pays each for the work he performs, and when the average cost is ascertained, the sods are sold to the several households at the same price, and are carried to their respective farms in small one horse carts, which are kept by the society for that, and for similar purposes, to which mere manual labour cannot be so beneficially applied. When these sods are dried and conveyed to the barns of the colonists, they are piled in a kind of stack, and portions of it are pulled out, not cut out, to insure their
being broken into small fragments. With these the bedding of the cows or sheep, as the case may be, is formed.

General Van den Bosch does not approve of the use of bog turf or peat as one of the materials of compost. He has found it not soluble in animal excrements, and finds it to impede the process of fermentation, which is the most important part of the preparation of the heaps of manure. He has, therefore, adopted another expedient by paring the second year's grass land, whether of clover, ray grass, or flax. These clods containing a proportion of the roots of the plants which have been before harvested from them, and much garden mould, become useful auxiliaries to the heathy turf, and spare the use of that material which, if solely applied, would require almost as much land to supply it as the farm itself. According to the General's experience, two loads of parings from the clover or grass ley are equal in effective operation to three loads of the sods from the heath lands. The straw of the buck wheat is also, as far as its small produce extends, made use of for the same purpose as the parings of the heaths and the leys.

The bedding of the cattle with fresh material is performed every morning and evening, and remains under them seven days and nights, when it is wheeled to the dunghill. Each morning that which lies near the hinder part of the cow is thrown forward, and the part towards its head takes its place, and fresh heather, about a quarter of a fodder, or 250 lbs. added to the bedding; the same is also done every evening. The sheep and pigs are only supplied with fresh heather once a day. It is reckoned that ten sheep make an equal quantity of dung with one cow. It must be obvious to everyone that the changing and consequent turning over thirteen times must make the mixture of the animal and vegetable substances more equally rich; and the uniform treading of it must break it into small particles and give greater scope to the fermentative putrefaction.

Each week the stalls are cleaned and the dung conveyed to the place appointed at the back of the barn. This is of a round shape, from three to four feet in depth. The bottom and sides are walled with either clinkers or turf, and made water-tight. It is commonly
from twelve to fourteen feet in diameter, and sufficiently capacious to contain the dung made by the cattle in the course of four weeks. The mass is thus composed of portions which have remained from four weeks to one day, over which the ashes from the household and all the sweepings of the premises are strewed. Adjoining to the dung-heap is the reservoir, into which the drainings of the stalls of the house and the human faces is conveyed. This cess-pool containing about a hogshead, must never be allowed to run over, and if it has not rained, must every other day be filled up with water, and then with a scoop taken up and sprinkled over the heap of dung. As this heap contains four weeks dung, or 30 fodder, or 15 tons, the administering fourteen such portions of rich fermenting matter, must vastly enhance the value of the whole for the purposes of vegetation.

At the end of the fourth week the dung-hole (called locally the gierback) is emptied, and its contents thus again turned over, the most putrid parts being by this means brought to the top; it is formed into a heap from three to five feet high, and carefully covered with sods; by this covering the fermentative heat is prevented from evaporating, and the rain water is kept from the mass, into which, if it penetrated, it would check fermentation. When the heap has lain and fermented during one, two or three months, it is carried to the field which is to be manured with it. The covering of sods is separated from the heap, and carried to the dung-hole, where it is laid at the bottom of the next monthly accumulation, and imbibes with it an equal proportion of vegetative force.

There is some tact necessary to ascertain the precise point of fermentation when the compost can be most advantageously applied to the soil, but all the rest of the process which has been here (it is feared too much at length) described, may be executed as well after a few days initiatory instruction under active inspection, by one who was previously ignorant of agriculture, as by the man who has practiced nothing in the course of his life but ploughing, sowing, and reaping. In fact, General Van den Bosch has found that the tailors, masons, shoemakers, and even the Jew-pedlars, brought from the
CULTIVATION OF POOR SOILS.

27

towns, make quite as useful and flourishing colonists, as those brought up with all the ancient prejudices of farming labourers.

The importance of this subject of accumulating manure must excuse the review of some other sources from which it is procured.

The roads within the colony of Fredericks Oord are formed with heather, sand, and peat. They are necessarily very bad, and scarcely passable, except by the peasantry in their wooden clogs. But this mixture, under the influence of the air and the water, when combined with the animal excrements which, though sparingly, are in some degree mixed with it, is a useful auxiliary supply of manure. The ditches, with which the houses and farms are fenced, in some cases, or the earthen banks in others, are sources from whence some supplies are drawn. These, though secondary to the great resource already described, when collected form a large mass. Lime is made in the open fields, from sea-shells; these are strewed, in alternate layers, with dried peat. Passages, for the fire and air, are left through the whole of this field kiln. It is covered over, very closely, with sods somewhat moist, so as to prevent the heat from escaping in too great portions. It is set on fire, and continues to burn from three to five days, when the whole mass of peat-ashes and lime is mingled together. This mixture is then, with the scrapings of the roads, the debris of the earthen fences, the bottoms of the ditches and canals, and other substances, formed into a compost, and applied to the soil.

It will be easily perceived that, in the species of cultivation carried on in these poor soils, a very great portion of the labour must be devoted to the preparation and application of manure. The labour with spades of six individuals in digging seven acres of land, how frequently soever, in the course of each year, it may be thought necessary to repeat the operation, can occupy but a small share of fifty-two weeks. The planting or sowing, with the harvesting, can occupy but a still shorter space; and thus the remainder may be usefully employed in the concoction of the composts for manure.

This subject of manure has been extended to a greater length than was originally designed. It will, however, render it less necessary to exercise the reader's patience on the parts of cultivation which
are to follow the dung. This is, however, the all-important part.—
Dung is to cultivation the moving power; it is to agriculture what the
water, the wind, or the steam is to the mechanical improver. As the
mechanic must first ascertain the extent of the power he can com-
mand before he constructs his machine, so must the agricultural im-
prover, previously to his commencing, know the extent to which he
can raise his provision of manure.

In what has preceded, there has been shown the way, not in which
may be, but in which actually is, obtained from the poorest land, by
the labour of man almost exclusively, a quantity of manure which no
farmer in England at a distance from a great city, has ever thought of
applying to the soil. He is not a bad farmer who can so manage as
to have ten loads of dung per year expended on his land; and it is
doubtful if one-tenth of our English farmers apply to each acre half
that portion. By the actual practice in the colony, the power is seen
to be gained; and such a power, in whatever mode it may be applied,
is no small acquisition for any country, but by far the greatest to a
country where thousands are in want equally of employment and
of food.

It may be thought that this quantity of manure contains less fruc-
tifying power than that composed of a greater proportion of animal
exuviae. It would be rather difficult to determine that point chemi-
cally: and nothing but presumptive arguments, or experiments not
plainly or carefully, or perhaps, fairly made, can be appealed to. By
the continued fermentation that is kept up till the manure is buried
under the soil, less nutritive power escapes than does in our common
husbandry. Grouner, a German agricultural writer who visited this
colony and drew up a detailed account of it, states the effective value
of one ton of the compost to be equal to $\frac{1}{2}$ bushels of rye. If that
be estimated at 2s. 8d. per bushel, it would give the value of the
corn produced by it to be 6s. 6d.; or, that the whole 150 tons of
manure applied to the seven acres of land would produce crops worth
48l. 15s. more than the same land would yield without such manure.
This is, however, not the way to view it. After mere digging and
sowing, without manure, such land might, the first year, yield some
increase, though scarcely sufficient to furnish the means of subsistence to the cultivator. In the second year, it would scarcely produce more than the seed, and in the third year, probably not the seed.—What may be the productive power of this kind of compost we may not be enabled to ascertain; but the effect of it may be seen in the large crops that are annually raised, and which all accounts agree in describing to be increased with every successive rotation.

When these little farms are brought into cultivation, they are usually divided into four fields, of near an acre and a quarter each, one field of near an acre, and the remainder is occupied by the site of the house, barn, and stalls, and by a garden and a patch for early potatoes. One of the fields is sown with rye, which, in the spring, is cut green for the cows; it is then sown with barley and clover-seeds, and the barley is harvested. Another field of the same extent is cultivated wholly with keeping potatoes; another is sown with rye, which is harvested, and supplies the household with bread; and the 4th has a crop of clover, partly cut green for soiling, and partly made into hay. The other field, of about one acre, is in permanent grass; either ray grass, or what is now said to have been found more advantageous, of florin.

Nothing is to be added on this part of the subject, though it may be proper again to say, that the rotation, the harvesting, and every operation, is under the inspection and direction of one of the officers of the establishment.

After a few years' experience, it has been found that, on the average, the annual excess of produce over subsistence, of each of the first fifty-two families established at Fredericks Oord, has amounted to 100 guilders. The average produce was thus:—
The annual expense of a family of six or eight persons; if of six, of persons of mature age; if of eight, six of them being children above six years old.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 bushels of potatoes for food, at 10s.</td>
<td>G. 75</td>
</tr>
<tr>
<td>20 bushels to plant</td>
<td>10</td>
</tr>
<tr>
<td>48 bushels of potatoes, 20 bushels of barley-meal, and the first cost of two pigs for fattening</td>
<td>62</td>
</tr>
<tr>
<td>5 bushels rye, for seed</td>
<td>8</td>
</tr>
<tr>
<td>5 bushels barley</td>
<td>7</td>
</tr>
<tr>
<td>60 ells linen at ten sous per ell</td>
<td>30</td>
</tr>
<tr>
<td>60 ells coarse woolen cloth, at 12s.</td>
<td>36</td>
</tr>
<tr>
<td>Making the clothing</td>
<td>13</td>
</tr>
<tr>
<td>Consumption of bread, butter, oil or candles, and other small objects, at the weekly rate of 3 guilders and a half</td>
<td>182</td>
</tr>
<tr>
<td>Rent to the Society</td>
<td>50</td>
</tr>
</tbody>
</table>

Leaving as excess £8 2 4

The annual produce of the farm, as shown in this statement, drawn up from actual regular accounts, and published under the sanction of a most respectable committee, shows what a state of fertility, in a short period, may be created on land worse in quality than some millions of acres which, in this kingdom, are utterly unproductive. In the progress of advancement, the society becomes gradually reimbursed for a considerable part of the sum which composed the outfit of the several families of colonists. They will have gained rent, at
the rate of about 12s. per acre, for the seven acres of land, the house, and barn. They will have been paid for the flax and wool which has been spun; for the use of draught cattle, carts, and implements; for the furniture and clothing; and for the provisions consumed before the first crops were harvested. They will thus reduce the capital actually advanced to a less sum than will be covered by the annual future rent; for the seven acres of land, which cost them originally less than four pounds per acre, will produce a yearly rent of more than that sum.

It is the object of the society to render each family independent of the institution, and subject to no other control than that which may arise from a feeling of their own advancing prosperity; for this purpose a graduated scale of stimulants have been introduced, which are stated to have produced most beneficial effects. Every year medals are distributed among the most meritorious colonists, which are worn at their button—they are of copper, silver, and gold. The first is given to those who have shown most diligence and good conduct, and entitles them to leave the colony on a Sunday without asking permission. The silver medal is given to such as can show that they have made some considerable savings beforehand, and entitles them, as well on working days, at the intervals of labour, as on Sundays, to go beyond the colony without asking permission. The gold medal is given to such as can show a clear yearly income from their work of 250 guilders, and releases them from all the restraints which the regulations of the colony have appointed. They become free tenants thenceforward. These distinctions and privileges may, however, be forfeited, or may be suspended for one, or for several days, by such subsequent misconduct as, in the judgment of the director in chief, may merit that privation. The appointed punishments for offences are well graduated. Smaller faults receive reprimands, or deduction from the earnings of the offender, within the colony.—Graver offences are judged by a tribunal, at the neighbouring town of Steenwyk, and are punished with imprisonment or banishment to another colony, not far distant, at Omme-Schanze, where, within the walls, they are kept to hard labour. The greatest circumspection is
enjoined on the quarter-masters and section-masters, in watching over the moral conduct and decorous behaviour of the people whilst at work. They must reprove them for any indecent or profane words or actions, and check every incipient symptom of wrangling, quarrelling, and fighting, and especially guard against the use of ardent spirits, to which the lower classes, induced by low prices, in Holland are too much addicted.

When the society had proceeded with their plan a sufficient length of time to ascertain its stability, and were satisfied of the correctness of the calculations on which it was founded, they naturally wished to extend its influence. Though the liberal contributions and annual subscriptions had been judiciously dispensed, and the security they possessed was more than equal in value to the money that had been expended, yet the returns were necessarily slow from the whole, and from the several farms could only be obtained in the shape of annual rent. Their stocks of horses, cows, and sheep, as well as of carts and the other implements of husbandry, though regularly increasing in number and value, could not, without checking the progress of the plan, be converted into money. It became thus necessary, with the views entertained of great extension, that a capital should be procured commensurate with such extension of plan. It was, therefore, resolved to raise by loans, to be repaid by instalments in sixteen years, sums equal to the outfit of as many families as should be established in the colony.

As each family required 1700 guilders to settle it; and as three families, one of which consisted of six orphans or foundlings, could be advantageously classed into one group, the loans were limited to 5100 guilders, or £425 sterling. These might be advanced by individuals, by charitable corporations, by communes, or by the king, either in his individual character, or by the government, of which he is the head. The bodies or persons contributing the before-mentioned sum were to have the privilege of sending to the colony three families, two of them to consist of six paupers each, and the third, of six orphans or foundlings, not under six years of age, with a man and woman, a married couple if practicable; or if that could
not be done, a woman only, to manage for the children. For the
maintenance of each child, the society is to be paid 60 guilders, or 51.
yearly, which is to cover the whole expense, including their educa-
tion, and religious and moral instruction. This sum is considerably
less than the amount of what is expended in the orphan-houses and
poor-houses of the communes, where it costs from 114 to 120 guild-
ers yearly, for each child. The advantage to the communes is thus
the saving nearly half the expense of supporting six children, and the
whole of that of the twelve paupers. The society looks for re-im-
bursement to the annual excess of the labour of the two pauper
families, and to the stipend paid by the communes, as well as to the
sale of the linen and woollen cloth made in the first year of settle-
ment by the whole three families. Without entering into the details,
which are necessarily very prolix and minute, it may here be considered
that the annual excess of the profits of the three families combined
will amount to 440 guilders. The wool and flax, bought in the outfit
for three families are charged in that estimate at 200 guilders for
each, or 600 guilders. This, saying nothing of any profit on the
spinning, is assumed to be received in the course of the first year.—
The mode in which the loan is to be extinguished, will then be the
following:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt or amount of the loan</td>
<td>5100.00</td>
</tr>
<tr>
<td>Interest at the rate of 5½ per cent</td>
<td>280.50</td>
</tr>
<tr>
<td>Produce of linen and woollen yarn</td>
<td>600.00</td>
</tr>
<tr>
<td>Profits, being excess of labour beyond expenditure and board of orphans</td>
<td>440.00</td>
</tr>
<tr>
<td>Debt remains at the end of the first year</td>
<td>4340.50</td>
</tr>
<tr>
<td>Interest at the rate of 5½ per cent</td>
<td>238.73</td>
</tr>
<tr>
<td>Profits of labour and board of orphans</td>
<td>440.00</td>
</tr>
<tr>
<td>Debt at the end of the second year</td>
<td>4139.23</td>
</tr>
<tr>
<td>Carried forward</td>
<td>4139.23</td>
</tr>
</tbody>
</table>
OBSERVATIONS ON THE

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brought forward</td>
<td>4139 23</td>
</tr>
<tr>
<td>Interest at 5½ per cent</td>
<td>227 66</td>
</tr>
<tr>
<td>Profit of labour and board of orphans</td>
<td>4366 89</td>
</tr>
<tr>
<td>Debt at the end of the third year</td>
<td>440 00</td>
</tr>
<tr>
<td>Interest at 5½ per cent</td>
<td>3926 89</td>
</tr>
<tr>
<td>Profit of labour and board of orphans</td>
<td>215 89</td>
</tr>
<tr>
<td>Debt at the end of the fourth year</td>
<td>4142 78</td>
</tr>
<tr>
<td>Interest at the rate of 5½ per cent</td>
<td>440 00</td>
</tr>
<tr>
<td>Profit of labour and board of orphans</td>
<td>3702 78</td>
</tr>
<tr>
<td>Debt at the end of the fifth year</td>
<td>440 00</td>
</tr>
<tr>
<td>Interest at 5½ per cent</td>
<td>3906 44</td>
</tr>
<tr>
<td>Profit of labour and board of orphans</td>
<td>3466 44</td>
</tr>
<tr>
<td>Debt at the end of the sixth year</td>
<td>190 66</td>
</tr>
<tr>
<td>Profit and board of orphans</td>
<td>3657 10</td>
</tr>
<tr>
<td>Debt at the end of the sixth year</td>
<td>440 00</td>
</tr>
</tbody>
</table>

Without carrying on this calculation to the end of the term, it is clear that if the data are correct, the whole debt must be extinguished at the end of the sixteenth year, and leave a small surplus of 169 guilders 73 cents. The society will then be in the unencumbered possession of three farms, containing twenty-one acres of highly improved land, yielding a rent at the rate of twelve shillings per acre, with the stock and implements, whilst the commune which has lent the money, will have been disencumbered of twelve paupers, and the kingdom have half that number of the advancing generation instructed in their moral and religious duties, and taught to acquire habits of industry, parsimony, and independence. As far as this plan shall succeed, it must be the harbinger of vast improvement.
among many children who would, without it, probably, have become
a burden or an annoyance to society.

The communes, or individuals who contribute to this loan, are to
have the power at all future times of keeping up the number of three
households on the estate of the society, and thus the relief they obtain
by the loan is a perpetual resource which may be made available
for ever against the evils of vagabondism and pauperism.

It is not to be wondered at that such a plan, after the success
which had attended the first operation had been ascertained, should
have received extensive support and considerable enlargement. Com-
mmissioners were appointed by the government to examine all the details
and to make a report. The individuals nominated for this purpose
were possessed of activity and discrimination; and, on their report
being made, the government extended effectual aid, and many com-
munes and several charitable individuals embraced the proposal, and
have had their commensurate number of paupers and orphans admitted
into the colony. The colonists have been increased. The last sta-
tistical return before us, is up to the end of the year 1825, when the
whole number at the settlement of Fredericks Oord amounted to
6778 individuals, including those at Omme-Schanze under more rigid
control, and comprehending 2174 orphans and foundlings. Within
the last two years very considerable additions have been made to the
loans and the numbers admitted to the colonies. It was stated to
the writer of these observations, when in Holland, that the whole of
those in the kingdom, under this system, already amounted to more
than 20,000 persons; which he has now reason to think was rather
an exaggerated account. In the northern division alone, they exceed
8000, but the exact number in the southern part has not been as-
certained.

All the transactions of this society are not only scrutinized at re-
gular periods by special committees from its own body, but all the
proceedings are published quarterly in a Journal (the Star), with
clear statements of the accounts. From these, as far as they have
been examined by the writer, being only to the end of the year 1825,
it may be fairly inferred, that they are proceeding on a secure plan,
OBSERVATIONS ON THE

such as may render permanent and capable of almost unlimited extension, this benevolent attempt to render even indigence beneficial to the community.

We have already adverted to the teaching, and to the religious instruction of the colonists. One of the first principles of the institution, was to provide due means for these objects. Churches are provided for the Catholics, Lutherans, and Reformed Communions, and a regular attendance on the services of the confession to which the colonists belong is strictly enforced on all of them; even for the Jews a provision is made in this respect. According to the representations of the clergy, who complained bitterly of the utter ignorance of every religious idea or feeling among those who were first fixed in the colony, but especially among the young, the improvement has been so great as to be highly gratifying to their feelings.—The Catholics remark much more numerous attendants at the confessional than formerly, and the Protestants have the pleasure to find, that a much larger and an increasing proportion of the adherents to their respective modes of worship now attend at the sacrament, than at the first establishment of the colony. The latter observe, too, a growing disposition in the poor to appropriate a part of their small spare money to the purchase of bibles and other religious books, which is encouraged by the society. Those who have such books must satisfy the quarter-master, at his periodical inspection of their households, that they are taken proper care of. The pious instructions, combined with the disciplined constant employment that is demanded, appear to have had a most beneficial influence on the moral habits of all the paupers, but more especially of the younger portions of them.

School-houses are built, and regular masters provided. As the young are occupied a part of their time in the details of cultivation, or in spinning, the hours devoted to their education are chosen so as best to combine both objects. The smaller boys and girls are at first taught together, but soon separated by meeting at different hours.—During the winter, more hours are devoted to education than in the summer, when the fields require more labour. Commonly two hours
CULTIVATION OF POOR SOILS.

37

in the morning and two in the afternoon are passed in the school.—From the delicate circumstances in which the kingdom of the Netherlands was placed at its first establishment, owing to the religious difference between the two parts of which it is composed, it has been deemed wise, to keep education distinct from spiritual tuition, and hence the school-books are all of a description which none can disapprove; however the catholic or protestant adherents may regret that their respective peculiarities of doctrine are not to be found in them.*

The teachers, one of them from Hofwyl, have introduced the system of instruction adopted by Fellenburg.

In the introduction and arrangement of the plan here sketched, economy has been closely observed, and the salaries of all the officers of the establishment are fixed at very low rates. Thus the adjutant director of the first class is paid 1800 guilders yearly, and of the second class 1000, with dwellings. The sub-directors receive from 360 to 500, according to the number of families under their care; these have also houses provided for them. The quarter-master receives from 5 to 6 guilders weekly, and as his family can work with him in spinning and weaving they also earn something; when he has performed the duties of his station in a satisfactory manner, during a fixed number of years, two guilders per week are added to his pay. The section-master receives one shilling a day, and each of these is furnished with a dwelling. A book-keeper and his assistant are paid 12 guilders between them weekly. Each of the colonists may be gradually raised to these offices when he has shewn sufficient proofs of his knowledge, diligence, and good conduct.

By this very economical arrangement the whole expense of the administration of the affairs of the establishment, including the sa-

* A list of the books introduced, with the prices of them, will show, both the spirit meant to be infused into the young, and the economy which is applied to this as to every other object. Most of the books have the attraction of wood engravings in them. ABC books, 3d.—Erste Oefeningen in het Lezen, or First Exercises in Reading, 2½d.—Mother Anna and her Infants, 4d.—Grandmother and her Grandchildren, 3d.—Father Jacob and his children, 4d.—Children's Friend, 3d.—Explanation of our Saviour's Sermon on the Mount, 8d.—An Introduction to Agriculture, 1½d.
laries to the clergyman and the schoolmasters, amounts only to 25 guilders for each family, or about 6s. 6d. for each individual colonist. That sum must be very far below the value of the additional labour gained by the system of strict discipline and minute inspection which these officers are appointed to execute.

General Van den Bosch, the Director-General has received no emolument from his office, but is content with what is derived from his military rank, his performance of some of the most arduous duties of which are dispensed with. No doubt much of the success of the institution here sketched has been owing to the active intelligence the unbounded philanthrophy, the unshaken firmness, and incorruptible integrity, of that distinguished individual. The two committees are, however entitled to a large share of praise for the confidence they have reposed in him, and for the support they have afforded him when satisfied of the wisdom and practicability of his plans.

The rescuing of many thousand paupers from a state of misery, the preserving thousands of young persons from the vicious and criminal paths into which they were exposed to be seduced, must be of vast advantage to the whole nation. But the experiment, by the emulation it has kindled to pursue the same steps in the other portions of the kingdom, presents prospects of undefined and almost unlimited advantage. In the southern provinces similar plans have been formed and put in practice. A colony formed at Wortel, near Antwerp, on a barren heath in 1822, had at the end of 1823 one hundred and twenty five farms already in cultivation, when the society which had founded it made a contract with the government to maintain one thousand mendicants during sixteen years, at the rate of 35 guilders per year; these, mostly beggars and idlers from Brussels, entered in the course of that year. Though the provision of manure at the commencement was but small, and the summer of 1826 was one of great drought, yet the acres that were cultivated produced in that year a value fully equal, in some instances, to the cost of bringing them into cultivation. This is one of those plans stimulated by the example, and regulated by the experiment, exhibited at Fredericks Oord. Its chief director is Captain Van den Bosch, a brother of the General.
In other parts of the southern provinces similar proceedings are advancing; and we have heard of one individual, possessing a portion of heath land near Bruges, who has lately made a contract with government to take a thousand mendicants on the terms agreed on with the society who established Wortel. It seems not improbable that the spirit thus actively created and wisely directed, may be the means of lessening in a great degree the evils of pauperism and inactivity, and of checking the alarming progress of juvenile degradation.

If the observations here made shall be the means of bringing the important subject under the notice of some active, influential and practical philanthropists, who will contemplate the best means of applying them to the local and legal circumstances of this country, and will arrange any plan by which the experiment may be tried, the collector of them would most cheerfully contribute any aid in his power in co-operation with such persons.

If the attempt should be successful, and general emulation to pursue it be excited, the consequences may, in a few years, be the means of producing benefits, the extent of which the most sanguine calculation could scarcely beforehand anticipate.

It is impossible to look at the condition of Ireland and not to desire earnestly that some plan, similar to what is here sketched, but accommodated to the state of society, and to the character of the peasantry of that part of the Empire, could be tried. If successful, it might tend to remove the evil created by a population too numerous to be supplied with full employment, without the application of capital, which at present flows reluctantly into that particular channel.
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<th>Date of Issue</th>
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