

# AGRICULTURAL.

## Maintaining the Fertility.



The earth and air contain unlimited stores of fertility and all that is wanting is proper ventilation of the soil to make these boundless supplies available for the plants. If the Creator has supplied such stores of air and water why should it be assumed that the fertility which is necessary to supply the world of mankind with food and raiment, is limited, to such an extent that it is indispensable to "feed the stock" the grains produced from the soil and return to the earth the fertility taken from both the earth and the air.

The earth is only one factor in the production of crops. The air is just as important, and yet we hear nothing of restoring to the air the fertility consumed in the production of crops. As the earth needs the return of the fertility taken from it in the production of crops, why not the air? The trouble is the part the air performs is overlooked to a great extent, while it is true that growth is produced wholly by the combined action of the earth and the air.

The first great requisite is to keep the earth, by true cultivation, in such condition that the moisture that comes down readily may be absorbed and carried down into the earth where it is stored for future use. By the combined action of the earth and air it is brought to the surface when needed. Moisture is of great importance. Without it no growth can be produced, and with it fertility is both produced and can be carried to the feeders of the plants. Certain elements of fertility are contained in the earth and certain other elements are contained in the air, and when these elements are brought together in the earth available plant food is produced. This is done perfectly only when the earth is kept in proper condition by the true culture of the soil. Moisture carries with it the fertility contained in the air and takes up other fertility when it passes down through the soil and subsoil. When it reaches its farthest point on its descent it is supplied with fertility, and in its upward passage carries an increased amount of fertility to the surface, where it is supplied to plants to produce growth both of stalk and fruit.

What, then, are the best conditions of soil to conserve the greatest amount of moisture and plant food? It is evident that the soil must be kept in a mellow condition to a depth that will enable it to readily absorb the moisture of rains and melting snows. The best portion of moisture is lost by evaporation, and the surface must be kept not only mellow, but very fine also, in order that the moisture and accompanying plant food may be held near the surface until it can be absorbed and fully appropriated by the feeding roots of plants. If this is not done, and it is not done by the prevailing system of shallow plowing and insufficient cultivation, there must be a great loss of moisture by evaporation and another loss both of moisture and plant food when by capillary attraction it is brought to the surface. It is evidently true that the true cultivation of the soil will increase fertility, while a constantly increasing yield of crop will be produced also. It is universally observed that the best farmers always grow the best crops, while at the same time the fertility of the soil is kept up. The best farmers plow the deepest and give the best cultivation. For this one reason they are recognized as the best farmers.

That all manure should be saved and judiciously applied is a foregone conclusion. And that there is an almost universal neglect to do this is just as clear. But that the soil will use its fertility, when properly cultivated, unless the products are fed to stock and the refuse returned to the soil as manure, is not true in any degree.

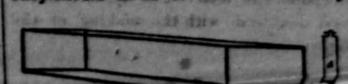
That manure and commercial fertilizer will renew the soil no one doubts. But that the soil is capable of increasing in fertility, when properly cultivated, while at the same time the yield and quality of crops are increased is clearly established by the growth of timber forest. The roots penetrating the earth preserve mellowness, and the condition enables the soil to drink in the moisture of rains and to preserve it for the promotion of growth. It may be supposed that the falling leaves preserve fertility. But while the decay of leaves does supply some fertility, yet the increase in growth of wood each season is greater than the increased production of leaves, and therefore, the fertility of the forest soil must have increased each season. By increase of wood over leaf growth, I mean that a large tree increases in growth each season in a much greater proportion than does a small tree. A tree two feet in diameter increases in the growth of wood each season much more than a tree six inches in diameter, so it is at once seen that there is in a timber forest an increased growth each season over that of the previous season. To meet that growth an increased supply of fertility is demanded and supplied each season. This infallibly establishes the truth that there is in the earth and air inexhaustible supplies of plant food.

Let those who can show that this reasoning is not true. And let them sustain their oft reiterated theory that plant food has been so sparingly distributed by the great Creator that it is necessary to withhold the food that is provided for mankind from its legitimate use and to turn it over to be fed to live stock in order to preserve the fertility of the soil.

## A Movable Yard for Poultry.

A convenient portable yard for fowls is shown in the illustration, from a sketch by E. C. Williams, Kings Co., N. Y. This yard is especially designed for those who keep poultry in cities, and are not able to let them run in the garden. It is six feet long, three feet wide, and two feet high. It is made of strips which are thirteen feet long.

Five of these strips will be needed to make a frame of this size. First make the frames for the top and sides. Two of the frames should be made six by two feet, two three by two feet, and one six by three feet. They should all be covered with coarse wire.



## PORTABLE POULTRY RUN.

woven wire fencing. The illustration shows the frame put together without the wire. These frames are to be fastened together by the mortised joint shown at a, and pinned with wooden pins or nails. A door may be put in on one side to suit the one who is making the yard. This yard is easily moved about on the grass or ground.

## Practical Pointers.

In some classes of farm products over-production has not so much to do with the depression of prices as has poor quality. This applies equally to products so widely different, as cattle and fruit.

The harrow and the roller are among the most important of the farm tools. Without the liberal use of both the small grain crops can hardly be put in properly.

The small farmer cannot afford to load himself up with expensive machinery for cultivating each separate crop. Very often the farmers of a neighborhood can unite to advantage in such purchases. Practical co-operation whenever you can do it.

One of the surest methods of conserving the fertility of the farm is to observe a proper rotation of crops. No farmer can afford to neglect this no matter how rich his land may be. Where it has been attempted the results have been satisfactory.

One of the secrets of success in farming in the eastern states lies in the fact that a few garden vegetables, a little fruit, a few pounds of butter or a few dozen eggs every week, with a few extra crops at various seasons, may amount to more money in a year than one large special crop of grain or cotton and it can be produced without extra labor at high prices, and without keeping extra teams, which must be idle most of the year.

There was a time when celery growing was only followed with a view to having a supply for fall use. Now the first crop may often be seen in July. To obtain the plants necessary for this early work the seed has to be sown in the hot bed, followed thereafter by regular sowing out of doors for a succession of plantings. For early use the White Plume, which has leaves partly white, has been found to give general satisfaction.

An experienced real estate agent once advised a farmer who desired to sell his farm to "wait a few months, as the roads are so bad now that no man will buy it if he rides out there at this time of the year." This may be a hint to some farmers that a good road increases the selling value of their farms as much as they cost in increased taxes, and perhaps a great deal more. Very few who consider the matter will doubt that they increase their value as homes to the same extent.

Our farmers almost always desire more land than they can properly work. If they do not make money they generally think the reason is they have not land enough, and often run in debt for more, but the mortgage which they acquire with it runs on unceasingly, while the land produces only in the growing season. So in the end the mortgage often wins, some one else takes the farm, and the old process is repeated, with only new actors in the program. This thing often repeated has set farmers thinking as it should. Possibly they have been mistaken in thinking more land was the requisite condition to prosperity. Fewer acres and better will usually give better promise of success.

## Spring Repairs.

It pays to look the farm over before the hurry of spring work comes on, and find out what ought to be done to keep everything about it in good condition. If time is taken by the forelock in this matter, a great deal of the hurry and worry of spring work, as usually experienced on the farm, can be avoided, and the sundry jobs necessary to keeping things about the place in good shape can be done more satisfactorily, because more leisurely.

## Scraps.

A long, strong thumb always indicates great will power and force of character. Australia has more churches in proportion to population than any other country. Sometimes the top from an acre of orange trees in New Zealand amounts to \$1,000. In Hong Kong and Shanghai there is no duty on spirits, almost the only thing imported free. Miss Lizzie Bailey, of Dexter, Me., has been teaching school continuously for 44 years. London finds employment for 500 women and girls as rag-sorters. They earn eight shillings a week. The handsomest English women are said to be found in London and the large towns of England. A postal system is about to be established in the Chinese Empire, beginning with the seaports. Wheel ploughs were known in ancient Italy, and appear on many Roman coins and inscriptions. Money issued from the royal mint last year was—Gold, £13,906,840; silver £849,939 bronze, £51,556. Dr. Schliemann found in the ruins of Troy pottery vessels that had been carefully turned on a wheel. Early New Zealand ploughs have been found tipped with jade or other stone to give a good digging point. The telescope was discovered by the children of a lensmaker who were playing with a couple of lenses. Lana, as early as 1675, accurately described the differential thermometer, and told how one should be made. An iron axe-head of 1730 B. C., the oldest authenticated iron implement known, is in the possession of the British museum. Nearly \$1,000,000 is said to have been expended in statuary in the public parks and squares of New York city. The Isle of Malta has a language of its own, derived from the Carthaginian and Arabian tongues. The nobility of the island speak Italian.

# MOST CURIOUS OF CITIES

## One in Flanders Which is Largely Inhabited by Lunatics.

There are cities and towns built upon the water, or, rather, raised above the water, like Venice, Stockholm, and the "pile villages" of the Orinoco and the Venezuelan Coast; but, of these, the most curious town is Gheel, in Flanders. This town is not strange because of its peculiar architecture or location. It is a thorough-going Flemish town, consisting of a straggling group of houses and a lazy, heed-not-to-morrow, semi-almost-purely agricultural population. The reader will naturally say: "Then why is it strange?" It is because of its population.

Gheel is not populated as is any other city in the universe. It is a little place of some 5,000 people; but of this 5,000 in 1892, 2,017 were lunatics. It is a "city of the dead"—lead in reason. The peculiarity of the treatment of these insane is that they are allowed to wander around, unconfined—as though under no surveillance whatever. They mix with the townspeople, partake in their amusements and festivities, and not infrequently assist them in their daily avocations. Lunatics of every sphere in life are found in Gheel—princes, nobles, merchants, peasants—and the inhabitants board them according to their ability to pay.

## ONLY A FEW VIOLENT MANIACS.

But it is well here to explain that, in this unique town, the insane are located or domiciled among the inhabitants and not confined in an asylum. Of course violent patients are not allowed to dwell in the cottages of the people. There is an institution for this class of lunatics, but the authorities of Gheel do not invite such patients, and, as a consequence, very few violent maniacs are found either in the town or asylums of Gheel. The Government has instituted a commission for this purpose. This commission also uses a power of vetoing the admission of the insane into the commune of Gheel. They do not desire intractable or incurable patients—no matter what be their station in life. And, having received a patient into the community, they use a vigilant surveillance over his or her movements, whether it be necessary to have the lunatic confined in the asylum or allowed to board among the inhabitants.

Because of this commission, which consists of the most famous doctors in lunacy in North-Western Europe, violence, unwise excitement, and all kinds of improprieties among the patients are well guarded against, and, as a consequence, the little community lives on its lazy existence in peace.

## EXPLANATION OF A LEGEND.

After leaving the railway station the first object that attracts the eye is the church of St. Amand, with the huge mission-cross erected in front. Then we enter the straggling main street, at the further end of which is the Church of St. Dymphna—the patron saint of the place. And this church is particularly mentioned because the legend attaching to it and to the saint constitutes the reason why Gheel is, or rather was, selected as a resort for what are supposed to be curable lunatics.

In the seventh century the daughter of one of the Irish kings was converted to Christianity by a priest named Gerebernus. She was Dymphna, and her beauty attracted even the monarch of all Ireland. But Dymphna was seized with a religious zeal—common to all sincere converts in those days—and she refused the attentions of every suitor.

As a result her father became enraged and threatened to wed her to a swineherd; but Dymphna, understanding her father's wrath, besought the holy monk Gerebernus to save her, and he counselled her to fly to Flanders. In due time she arrived at the place where now stands the town of Gheel, and gave herself to prayer and fasting. But the King, her father, was "beside himself with rage," and equipped a fleet of boats to "rescue her." Arriving at Antwerp, he soon discovered her hiding place, and immediately set forth alone to see her. He found her engaged in prayer, with several "simple" (insane) persons looking on—amazed at such piety. Dymphna did not see her father. She continued her prayers that the reason of those who had come to watch beside her should be restored, and the King, becoming enraged by her apparent want of filial love, drew his sword and cleft the head from the body.

The legend goes on to state how the insane were immediately made "whole in mind," and they went forth proclaiming the miracle.

From that time—now 1,200 years ago—persons suffering from mild forms of insanity were brought to the spot where St. Dymphna was killed; and, as is the case in all faith cures, many of them recovered their reason. In time a little village grew around the spot; the commune of Gheel was incorporated several centuries ago, and to-day the town itself, which is in the centre of the little commune, boasts of a population of 5,000 persons and two beautiful churches—one St. Amand, and the other the church of the patron saint, St. Dymphna.

Understanding the peculiarity of this colony of lunatics and its *raison d'etre*, let us go in spirit to the quaint little Armes de Turnhout inn and visit some of its inmates.

You will find in the sitting room perhaps a dozen men engaged at dominoes, cards, or conversation. Suddenly one of them has an unlucky streak at dominoes, and he remembers that he is made of glass. If every player were sane, they would think this a subterfuge to stop playing. But they know the poor fellow's monomania, and, with evident pity, they watch him rise from his seat and echelon toward the door, with eyes fixed and awed expression—fearful that the slightest collision with a chair, table, or doorjamb might break him into fragments.

## A WONDERFUL INFLUENCE.

Out on the lonely street someone is shouting—commanding. You listen, and you hear Napoleon directing his disease-fed troops upon the fatal retreat from Russia. The poor lunatic imagines that he is Napoleon. A crowd gathers about him—mostly lunatics. But he heeds them not. Suddenly a woman appears on the scene. She carries a little child. The lunatic sees the child, and at once Napoleon, Moscow, war—everything that is not—is forgotten, and the poor fellow rushes to the child and kisses it. He is sane again.

was a wonderful influence that children exercise over the insane. It is humanly unaccountable. But it is en leavoured to be accounted for by scientists of the Salpêtrière type, who say that the lunatics who come to Gheel have already impressed upon their minds the fact of their residing there with a view to their cure.

Gheel is undoubtedly one of the queerest places on earth. The writer dined there one evening. At the same table were seated an old gentleman and a young lady, not long out of her teens. It was a delightful party. The old gentleman had been a great traveller. He knew England as well as he knew Belgium or Flanders.

## A SURPRISE FOR DESSERT.

The young lady branched from the universal weather trunk to science, music, yachting, botany, and goodness knows what. Suddenly, just as the dessert was being put on the table, the young lady stood up and in the most tragic manner said:

"The time has come. I am prepared." "Don't mind her," said the gentleman. "The poor thing is demented. She believes she is Mary Antoinette."

But this incident was not the climax. The sun had set. Half an hour later the twilight had gone. Coffee, cigarettes, and liqueurs had done their duty. A game of dominoes had been begun when the old gentleman addressed the writer saying:

"You contemptible wretch! Know you not that I am the brains of Europe? And yet you endeavor to withhold me from guiding the monarchs of this benighted continent. It is now seven o'clock, and my despatch to the Czar of Russia should have gone by special courier ere now. Hang you—! Draw, sir—draw! There is only one way to avenge this wrong."

And thereupon the poor lunatic posed in fighting attitude, with a small ruffian for a rapier. The landlord's child came in and whispered a word in his ear, and lo! the "brains of Europe" quietly settled down to a game of dominoes.

It was well for Europe. For had it not such a condition of existence for mild lunatics much better than shutting them up in cells or asylums, where even the children cannot influence them for good?

It is a lesson worthy of trial—even though it began with superstition.

## KING LO BENGUELA.

He Tolerated "Missions," Though He Would Do Nothing to Help Them.

Matabeland has been little written about, because few white men have been there. The English newspapers are now printing advertisements of a "personally conducted" tour that is to start for the interesting region from which all but a few favored whites were debarred until a few months ago. Lovers of sport may have a particularly good time on this trip, for the country abounds with big game. The missionary Carnegie, who lived ten years in that country, has just written a little book, "Among the Matabels," which "throws much light on these brave people and their King. It was not white men so much as Maxim guns and repeating rifles that defeated Lo Benguela's soldiers.

Dr. Carnegie says Lo Benguela wished to enjoy some fruits of civilization while rejecting many others. He tolerated the presence of a few missionaries because they brought him good things from Europe that he coveted, but he would do absolutely nothing to help them. A word from him would have filled their schools with children but he would not give it. The people believed he was all powerful. It was he who brought the rain and abundant harvests. Their teeming gardens and abundance of beer and cattle exhibited the mighty power of the King and his mindfulness of their wants. An encouraging word from him would have done wonders for the missionaries; yet when they asked him to send them children to teach he would not lift a finger to help them. When Carnegie was about to go home he asked the King what he should tell the white men about him, seeing that he had been so indifferent to the progress of missionary work. The King replied: "You will tell them what you have seen."

It was probably as well for Lo Benguela that he died when he did. His people forced him into the war, believing that he was invincible. His overwhelming defeat destroyed all confidence in him as the great wonder worker of the tribe, a father who by his supernatural power could always protect his people. He could never have been King again.

## Russia in the Last Century.

Peter the Great said of his country, and said truly—"Russia is rotten before she is ripe." To realize the true meaning of these words and the fullness of their implication, one must study in detail the reign of Elizabeth and Catherine II. In Russia, during the eighteenth century, were to be found side by side the vices alike of savagery and civilization. Add to the lack of social instinct, of humanity in the wider sense, and of moral responsibility that is to be found in a Zulu kraal, the worst corruptions that are bred in courts like that of Louis XV., and one can form some faint notion of the Russian capital under Elizabeth and Catherine.

The country, as a whole, was Oriental in its want of civil organization, but without the idealism of the East. The ospital was a welter of blood and lust, barbarism and sophistry, atheism and superstition, drunkenness and savage violence, indolence and semi-insane activity. The moral condition was reflected in the physical. Never was there such a mixture of squalor and magnificence as in the palaces of the Empress Elizabeth. The rudest and the most costly furniture were jumbled together. Filth and splendor were always alternating, and the vilest food was eaten of plates of gold.—[The Spectator.

Just watch the man "who knows it all" And his expression pained When his small boy comes forth with things He'd like to have explained.

The Slavic countries, Russia, Roumania, and Servia, are the most illiterate in Europe, 80 per cent. of the population being unable to read or write. Spain is the most illiterate of the Latin-speaking races, the percentage of those unable to read and write being 65; Italy follows with 48 per cent. illiterate; France and Belgium about 15 per cent. In Hungary the illiterates number, 43 per cent.; in Austria 39 per cent., and in Ireland 27 per cent. In India only 11,000,000 out of 250,000,000 can read and write.

## MERRY MOMENTS.

A host in himself—The cannibal who devours his entertainer.

The kick of a cow is not the most acceptable form of milk punch.

When a man is asked to foot a bill, how can he be blamed for "kicking"?

Straw hats will show before long which way the summer breezes blow.

Mabel—"With what verses are you the most familiar?" Poet—"Reverses."

"Down brakes!" cried the railroad man's wife as the dinner platter slipped from her grasp.

The back-country farmer is the only fellow who gets the sugar question thoroughly boiled down.

Revenge is sweet sometimes, possibly, but never when the other fellow gets in his work on you.

He—"Oh, you may laugh; but I am not so big a fool as you think," She—"Goodness! I hope not."

Fwaddy (lighting a cigarette)—"You—aw—don't mind my smoking, do you?" Stranger—"Not at all, sir; I work in a glue factory."

"Are you sure Miss Oldtimes keeps up the study of ancient history?" Madge—"Oh, dear me, yes. I saw her reading in her diary to day."

"Why is Jack such a favorite among the ladies? He is neither rich nor handsome." "Oh, but he never attempts to guess their ages."

John's a big man in the nation, Do'n't lots and lots o' blowin'; Jerry plows on the plantation— Makes enough to keep John goin'.

Madge—"I'd just hate to be in your shoes." Mame—"Yes. If there's anything more destructive of happiness than another it is pinched feet."

You may sprinkle your fingers with musk if you will, But the cigarette fragrance will cling to them still.

A telephone girl receives calls, but she doesn't pay them. This part of the business is attended by those hiring the instrument.

Mr. Maures (insinuatingly)—"Do you believe in such a thing as love?" Miss Ratty—"Well there ought to be, after all you've made during your life."

Cholley smoked a cigarette— Choked him in a minute Some one had, by way of jest, Put tobacco in it.

There's nothin' like the weddin' Fer to make a feller learn; For he thinks that she is his'n But finds out that he is her'n.

Tom—"Did Maud tell you the truth when you asked her her age?" Jack—"Yes." Tom—"What did she say?" Jack—"She said it was none of my business."

La Fiance—"I am awfully sorry, Jack, but those roses you sent me don't match my gown." La Fiance (who paid \$9 a dozen)—"Can't you change your gown, dear?"

He—"You told me that you sincerely hoped for my welfare." She—"Oh, no, Mr. Sticks, you misunderstood me. I said I sincerely hoped for your farewell."

"I think I understand now," said Higgs, "why they speak of Miss Wellaby's new Paris-made gown as a 'creation.' It looks almost as if it were made of nothing."

"Did you give up anything last Lent, Gaswell?" asked Dukane. "I did." "What did you give up?" "A check for \$150 for my wife's Easter toggery."

Author—"I am troubled with insomnia. I lie awake at night, hour after hour, thinking about my literary work." Friend—"Why don't you get up and read portions of it?"

Stalate—"When I was a child my nurse made me terribly afraid of the dark and I've never gotten over it." Ethel Knox—"I wondered why you waited for daylight to go home."

Cholly—"I gave up cigarettes yesterday." Gus—"Indeed?" Cholly—"Yes. A tramp stopped me in the suburbs, and demanded my valuables. I gave up a full pack of cigarettes."

Employer—"Why were you dismissed from your last place?" Servant—"Because just once I got drunk." Employer—"How long were you employed there?" Servant—"One day!"

Duel Up to Date—"I challenge you to a duel." "Accepted." "Your choice of weapons—dagger or pistol?" "Neither. Winter ascent of Mont Blanc—rotten rope—three feet distance."

Mrs. Numother—"Look at the baby; doesn't he seem really different from most babies of his age—he is so—?" Mr. Crusty—"Yes—er—I think very often they are quite attractive, but, as you say, he is different."

## SEED THOUGHTS.

We give our body to the grave in corruption, but it will be surrendered to us in incorruption. The young Christian uncared for, like the town clock not looked after, is apt to go wrong.

Let us not be like them without faith, that think the bodies are lost forever that are cast into the grave; like children, seeing the silver cast into the furnace, think it utterly cast away, till they see it out again, a pure vessel.

Whilst thou hast time, amass for thyself immortal riches. Adapt thyself to the things with which thy lot has been cast, and love the men with whom it is thy portion to live, and that with a sincere affection. \* \* \* No longer be either dissatisfied with thy present lot or shrink from the future.

Thy spirit should become, while yet on earth, the peaceful throne of the Divine Being; think, then, how quiet, how gentle and how reverent thou shouldst be.

That which is often asked of God is not so much his will and way as his approval of our way.

As soon as we are with God in faith and love, we are in prayer.

If you do not wish for his kingdom, do not pray for it. But if you do, you must do more than pray for it—you must work for it.