becomes a cow, as to know the color it will have and the general form it will attain. That it is not possible to do so, is an evidence that our stock, even the best, is not bred up to its full capacity for milk, nor so well bred in this respect as for the more obvious traits of form, color and general appearance.

Breed, then, so that you will be able to predict the result; above all, do not be misled by mere individual excellence. Individual excellence is, of course, the end to be attained. But, let your breeding be such that you can repeat it at will, and not as a mere chance. In this view, remember that an animal represents its entire ancestry rolled or united into one. If that ancestry is of uniform, or increasing excellence in certain definite lines, the breeding qualities of the animal will, almost certainly, be true and satisfactory. If the ancestry is of heterogeneous and diverse character, no matter how pleasing the individual itself may be, it is, for breeding purposes, a scrub, and it will prove in the end a delusion and a snare.

What Farming Would Confer if Rightly Followed.

[By Prof. W. L. Chamberlain, Iowa Agricultural College, Ames.]

The condition, “if rightly followed,” at once raises the question, “when and how is farming rightly followed?” “How should we farm?” “What general maxims and principles must we follow?” These questions I must answer briefly further on. Meantime I assert my firm belief that on the whole there is no better business known to man, at least in the United States, than farming is if rightly followed, and that if rightly begun and followed it will confer health, comfort, increased intelligence, refinement, aesthetic enjoyment, independence, individuality, increased fertility, competence, permanence for family, ownership of land, and hence a place among the future nobility of the land. These points I shall notice one by one presently.

But to secure these great and most desirable blessings, farming must be, as our text says “rightly followed,” and by the right kind of a man. Good farming implies a good farmer. He should have health, intelligence and some capital. Too much have been expected of farming. All other kinds of business require some capital, or that you should work for some one that has capital; require intelligence, or that you work for some one that has intelligence; health or that you work for less than full pay. But farming seems to have been considered a kind of Botany Bay where all could be sent who were not fit for anything else. You know the saying “Any fool can be a farmer.” You know that you yourselves sometimes pick out your brightest boy for college life, professional life or business life, and keep the dullest, steadier, plodding one for a farmer. You know the story of the “coon dog.” The would-be seller of the dog recommended him most highly in that capacity. How he knew he was good on coons was thus: “The Lord (he said) never made anything in vain, and as this dog wasn’t good for any other earthly thing he must be a good coon-dog.” Now I am bound to say that farming has stood this severe test as no other occupation could. In it sick men have found health, poor men have found competence, and uneducated men have been forced to read, think, study and become intelligent students. It is one of the chief glories of farming that it has been so. Some twenty-two years ago, two years confinement and severe application in teaching had made of your present speaker a kind of white-faced walking skeleton, with a big congh and a small appetite. The cough was bigger than the man. The cough was the kite, and the man was the tail, and it was only a slender cord that anchored the kite and tail to earth, and it seemed only a question of time when the cord would break letting both fall. People gave me six months to die in. Well, I went to farming, thinking I would turn the turf over once at least before they put me under it. A year or two later I had regained health, and while visiting in a town ten miles away, an old gentleman asked me, “are you a relative of the young Mr. Chamberlain of Hudson, the teacher, who died there lately of quick consumption?” “Yes, sir,” said I, “I’m the fellow himself.” “Well, well,” said the old gentleman, “I should call you a reasonably jolly, lively red-faced sort of a corpus, but I heard you were dead.” Yes, farming often confers health where it is wanting. I have been there and tried it. So also has it often given education and always increased it if rightly followed. It has given competence from poverty, often, on new
and low-priced land. But, really, in order to be successful the farmer should have at the start, just as for other kinds of business, some capital, good health, and fair education, the more education the better, if it is of the right kind and does not make him feel above or divorce him from sympathy with the common people, and from country life and surroundings. How then shall such a man pursue farming in such a way as to gain the many blessings I have named.

First. He must have the right sort of a wife, snug, tidy, efficient, who believes in farming as an occupation, and in the farm home as the place to rear children to habits of industry, thrift, integrity, success. One who is interested in crops, stock and farm business and neighborhood. One who is not ceaselessly pining for the more exciting life of city or village. One who will be his helpmate in all good work. Such a one he should make his business partner and adviser. She should know all his business matters. The property and ready cash should be as much and as truly hers as his, and he should no more spend money or make important purchases or contracts without her knowledge and consent, than she without his. They two should constitute the executive and finance committee, until their children are old enough to be admitted as advisory members.

He should be progressive; should live up to the times and adapt himself to the condition of things, changed amazingly as they are since his father was a farmer. Those changes are of many kinds, due mainly, however, to the increased use of steam, and the improvement of machinery and of farm crops and stock. As a child, forty or more years ago, I remember a neighbor in Ohio, on his 400 acre farm; a man of iron frame, mighty muscle and great power of endurance. He seemed to scorn the aid of labor-saving machinery, as an insult to his muscle, and of improved stock and kinds of crops, as innovations of a wicked world. He used the sickle, and laboriously reaped one half or three-quarters of an acre of wheat a day, long after the grain cradle had proved that it could cut four or five acres a day as well as with less backache; stuck to the scythe long after the mowing machine was invented, and to the cradle after the reaper came; kept a "penny royal" bull for his great dairy, and raised 10-cwt. steers at three years old, when a good Short-horn sire would have added 800 or 400 to each; and so on.

Plainly, our progressive farmer must not imitate him. He must be quick to see and adopt real improvements suited to his needs and circumstances. Human muscle can never compete with the power of horses, wind, water and steam, and lightning when brain work has first harnessed them to do the work once done by human hands; and the progressive farmer will put himself and his farm in shape to use these great powers of Nature as aids in his farming, so far as he can do so to advantage.

Steam and electricity and machinery have wholly changed and revolutionized manufactures, transportation and commerce, and tenfold increased their rapidity and power. They have had less effect, in proportion, upon agriculture chiefly, perhaps, because agriculture is spread out so wide and so little condensed that these agencies cannot be so well and successfully applied. You cannot so readily apply steam power to your work in agriculture as in manufactures, commerce and transportation, and water power hardly at all, save indirectly in the manufacture of agricultural implements and machinery. The spinning jenny, cotton-gin and locomotive engine will help one man to do the work of 100 or more in manufactures and transportation. The steam thresher, indeed, will do almost as much in agriculture, because you can bring the grain together to it. But the steam plow and the twine binder must be taken around to their work, and must therefore waste fully half their power in carrying themselves about, and hence have less net power left to utilize for agriculture. And agriculture, I judge, must always labor under this disadvantage as compared with manufactures and transportation. But all the more carefully should the progressive farmer utilize the powers of nature and the aids of mechanism wherever he can do so profitably.

Still he will be conservative. If he "proves all things" he will, at least, "hold fast that which is good." He will not rush into every new and marvelous thing that offers to make him immediately rich. On such things he will experiment through his neighbors,
as the monkey used the cat's paws to rake the chestnuts out of the fire.

He will pursue mixed farming, that is, grain growing combined with stock keeping of some kind, as the only and heaven appointed means of maintaining and increasing his soil's fertility. But he will not "mix" it too much, so as to fritter away his time in profitless details. He will recognize the one great fact of the age covered by the single word "mobilization" or the immensely diminished cost of transportation.

When a bushel of Dakota wheat (or the flour from it) can be carried to New York for 10 to 15 cents, and a pound of Iowa beef or pork for a cent, and Michigan apples and Delaware peaches can be laid down in Iowa and Dakota cheaper than they can be grown there, it looks as if Dakota and states similarly situated must largely raise the wheat and meat, and Delaware and Michigan and states specially adapted, the apples and peaches. I use these as mere illustrations of a vast array of facts covered by the word "mobilization" in the sense I have given it, and which seem to tend inevitably towards specialization in agriculture, as based upon the principle in political economy known as "division of labor." In old times when transportation was costly or impossible the progressive farmer raised or made almost everything he needed, because that was cheapest,—best economy. Under the changed conditions he raises some things and buys others, because that is best economy. He must specialize somewhat, so as to do things wholesale, and justify the purchase and use of best machinery. His specialties should be those best adapted to his tastes, talents, soil, climate, markets and circumstances. He must not specialize so much, however, or in such a way as to diminish the fertility of his soil or the activity of his mind.

It goes without the saying that the progressive farmer must be a thorough business man. He must study the circumstances, grow the things he can best market and then market them wisely. He must be systematic, snug and tidy in his work; a good breeder, feeder, handler and houser of his stock, a good manager of his machinery, keeping it well oiled, bright, repaired and adjusted when in use. His mind should work with his eye and hand, or rather both before and with them. He is his own foreman, engineer, salesman, purchasing agent and bookkeeper; whereas the great establishments and corporations have experts and geniuses in each of these departments, and men not necessarily of special intelligence under them. Evidently the progressive farmer must be a thinker.

On these points I cannot go more into detail, but must hasten on to notice more specifically what farming will confer if followed thus. (1) Health. I have partly spoken of this. There is, I believe, no healthier occupation if rightly followed. But excessive physical exhaustion and weariness is neither healthy, necessary or wise. It is unnecessary, because machinery, utilizing the power of horses, wind and steam, enables him to do three times as much with half the physical or muscular effort. It is not wise, because the man physically exhausted every night is not fit to plan wisely for the morrow, or to read and study as his business requires or enjoy his family as he has a right to do. Nor is his health so good.

Comfort. Well if the farmer cannot be comfortable I don't know who can. Does he ever go hungry or ill clad or cold from necessity? Is not his house comfortable? Cannot he have books and papers and music and friendly chat when the day's work is done? I think I am entitled to speak on this point, since for over thirty years of my life I have been farmer or farmer's boy, and expect to be till I die.

Increased intelligence. The farmers' occupation compels him to read and to study. Intricate machines to study. Crops to grow and market both; "bugs," insects, mildew, rust, blight, drouth, flood, tornado, all to study or oppose, stock and crops to improve, market to watch. Why he must study. Necessity is upon him. It's like the story of the pig.

City boy says, "Ye see the dog was after him hot and would 'o knabbed him, sure, but just then the pig shinned up a tree." Country boy retorts, "Why, you blamed city greenhorn, don't you know a pig can't climb a tree?" "Yes but he had to, he had to! The dog was right on him." And so the progressive farmer must study and read. His occupation stimulates him to this as does almost no other unless it be the literary and scientific professions.

Refinement and enjoyment. The pro-
gressive farmer's surroundings promote refinement and aesthetic enjoyment. Fruits and flowers, red fields of clover and golden seas of waving grain tossing in the wind like waves upon the lake; calves well built and handsome, and colts finely moulded and fleet, the broad, bright glory of the sun hidden by smoke and lofty buildings; from the denizens of cities, the broad, green meadows and fields of dark green corn, the gold and crimson of the forest leaves in—these things and things like these fill the very soul of the intelligent, educated farmer with keenest aesthetic delight. Then there is the milder, less aesthetic, perhaps more substantial enjoyment of watching the unfolding and development of the various kinds of crops and stock; of making improvements in field, fences, drainage, buildings and seeing the good results thereof. Such things furnish pure and real and rational enjoyment.

Competence. Add to this the freedom from fear of want. The farmer does not grow vastly rich it is true, neither is he, on decent soil, often distressing poor. Business men in cities often grow rich, but over 90 per cent. of them fail, financially, sometime in their career unless I wrongly remember the statistics. Not 10 per cent. of the farmers ever fail in their business, nor do any of them "come upon the town." Over 5,000 persons in Columbus (population 51,000, census of 1880) winter before last, received aid from the city, county or state in the way of charity. Did you ever hear of a bona fide, wide awake farmer that came to township trustees or county commissioners or city council for charity, for food, clothing or fuel. That kind of people crowd the villages and cities. Isn't it a real feather in the plume of farming as a business or profession that if rightly followed it always confers a reasonable competence?

Independence. Farming, rightly followed, confers or promotes independence. By this I do not mean wealth or financial independence, but individuality, independence from dictation by other men, the right to order ones own actions.

In another lecture I have shown the dependence of the manufacturing and mining and commercial classes. Ninety-five per cent. of them work for someone else. Many of them can hardly say their souls are their own. In resisting the tyranny of employers, companies, corporations, syndicates, they have joined trades unions and various secret labor organizations, often more despotic than any European or Asiatic Czar, Sultan, or King.

As I write these words the daily paper tells of 250 workmen in a shoe factory, perfectly friendly towards their employers, and satisfied with their pay, ordered out on a strike by some distant grand master or high official of their organization; and of a larger body of tanners and curriers, out all summer on a strike, supported by their organization till now, and then the strike declared off, the support withdrawn, their old places filled with new men, and they unable to find work anywhere, and all this right in the teeth of winter. Is it not worth something that farming gives exemption from such troubles; confers freedom, independence and individuality? Who dares claim a right to dictate to the farmer?

Best opportunities to rear a family. I have spoken of this in another lecture. It is one of the greatest benefits conferred by the occupation of the farmer. If the parents do their duty, the surroundings cannot but develop strength, purity, vigor, intelligence and manliness in boys and the best type of womanhood in the girls.

Permanence. We are a drifting, restless, roving people, we Americans. We need to be anchored to the soil in order to grow into permanence of family. Thus anchored, we or our children get the benefit of all improvements made, in fertility, orchards, building, betterments, improvements in live stock, and in a solid business reputation for integrity.

I like the English idea of taking sons regularly into business partnership. Many farmers and especially breeders in Ohio have adopted the idea, as T. C. Jones & Son, C. Hills & Son, J. Dodge & Son, C. C. Dodge & Son, among the Shorthorn breeders; and many others in other branches of breeding and farming. I cannot but deplore the tendency of our American boys to undervalue such chances of business partnership and land owning, and to rush into trade in cities or business upon our railways as traveling salesmen or in our manufacturing concerns. Some rise to position; and wealth, but as a rule they
live on wages all their lives, subject to caprice of employers or dictate of organizations which they join, seldom owning even a roof to cover their heads; renters all their lives when they might be land owners, landed aristocracy in 30 or 40 years. For by that time the real land-owning farmers will be the aristocracy, the nobility, here as in England and on the Continent, and the homeless and the landless and propertyless classes will be the dissatisfied and discontented ones.

These are some of the benefits farming will confer if rightly followed. They are many and substantial. Let the audience suggest others and discuss them.

Is It Worth While to be Honest?
[By Prof. W. I. Chamberlain, Iowa Agricultural College, Ames.]

It is at least worth while to meet the question fairly. Dishonesty, small and large, is all abroad in the land. New forms of stealing and robbing legally are multiplying. Corners in grain and in stocks, with the attendant gambling; substitutions and adulterations of foods and other merchandise, by which a great concern steals a small fraction of a cent and of health with each half pound package or pint can sold; schemes old and new and bunko games for getting money or value out of others with or without their consent, but without rendering a fair equivalent of value or of service; large fortunes of ill-gotten gains; haste to be rich; rich honesty if may be, dishonestly or doubtfully if must be. Such and such like things tend to raise the question whether it is not merely an old-fashioned proverb, that "honesty is the best policy."

Our answer to this question will depend much upon the meanings we give to the two words, "honesty" and "policy." If the first means strict pecuniary honesty and the latter means the way to make money fastest for a time, then the proverb is not true. Strict honesty does not always bring quickest wealth. Many a man during the war grew suddenly rich on shoddy clothing sold the government to its robbery and the suffering of our troops. Many an expert gasmer takes in a small fortune in a single night, of the money of his dupe; many a bank cashier has fled the country suddenly. Enriched at bitter cost of stockholders or depositors or both.

Honesty does not always pay the largest immediate cash returns. If it did there would be no bogus butter, cheese, sugar, coffee, spices, no railway and grain gambling with corners; no thieves, counterfeiters, forgers, gamblers, swindlers, defaulters, burglars or robbers.

But if our proverb means that honor, integrity and truthfulness are in the long run and in the large issue wisest for a rational and moral being, then I think the proverb is beyond all peradventure true. And this, I think, was the original meaning of this much abused proverb of poor Richard.

Follow with me a few illustrations that seem to show that in this sense the proverb is true.

First in agriculture it is true. The short-sighted often doubt it at first. Many a farmer, so-called, has thought to cheat his farm and crops or stock and succeed thereby; has sown poor seed or scant, only to find that "whatever a man soweth that shall he also reap." Or he has cheated or pinched in care or feed of cows, sheep, steer or pigs only to have his dishonesty thrown back into his face his butter or wool yield the weighers sales in Chicago. Or he has skimmed his soil by poor tillage, or skimmed it by failing to restore the exhausted elements of fertility. For a few years in each new locality long-suffering nature has endured this dishonesty, this theft from the generations yet to come, and then she has rebelled and brought retribution. Whole regions of the Old World, stripped of their fertility by the vandalism of misnamed "agriculture," stand to this day unsightly monuments, with these words deep-cut for their inscriptions "In agricultural honesty is the best policy."

How is it in merchandise. Where do you buy your goods to-day? Where you were cheated yesterday, or where you yesterday got the exact goods in quality and quantity you paid for? Who are the merchant princes of our great cities, whose massive blocks tell of real success? They are the men that dug deep and laid the foundations of their massive blocks and of their vast business relations upon the bed-rock of fundamental honesty. Why the "firm name and good-will" of some such business houses is worth a million dollars in solid gold.

How is it in banking? Why our whole complicated modern system of