Live Stock and Dairy.

WHEN THE COWS PAY.

Correspondence of The Progressive Farmer. The difference between a paying and non-paying dairy cow is some times so apparently slight that it is not noticed by the average person. Here are two animals which look almost identical. Both are healthy, good eaters and good milkers. But one has a persistent tendency to yield just a little more milk per day than the other, and if anything it is a trifle richer in butter fat. Moreover, careful observation shows that this cow keeps in milk a little longer than the other. Now, these points could not be noted without some attempt at keeping accounts. The record of every animal on the farm should be kept daily, and in this way comparisons can be made. Now, suppose one cow thus gives about a quart of milk a day more than another, and extends the milking period over a much longer time every season. This difference added up and converted into dollars and cents would show at the end of the year that one animal paid a good profit, while the other barely paid expense.

This condition of affairs is just what can be observed on many farms to-day. The dairymen may be experts in their line, and they may have brought the question of cost of feed ing down to the point where little further improvement can be made. Yet there is such a difference in the relative yield of the animals that the profits of one must be cut down in order to make up for the deficiencies of others. So extreme are these cases at times that there is a difference of one-half some years between the actual profits of two different dairy cows. The difference is due entirely to causes that can be remedied. Granting that both are fed the same, and very satisfactorily and economically, the cause of the difference in the yield must be found in the cows themselves. One animal possesses the natural gift of yielding plenty of rich milk, while an other does not, and in order to secure a good supply everything must be done to encourage her. The latter is a cow which should not be tolerated on the dairy farm longer than absolutely necessary. The stock should be graded up to the standard of the first. A good plan is to take the best animal of the farm and try to make all the others her equal. There will naturally be some difference on every farm, but if the method is continued year by year of improving the stock up to the highest standard the profits must gradually increase. Too little attention is paid to keeping accurate records of performances of dairy cows. This is just as essential as any other part of the work. It is the only successful way of finding out which cows pay and which do

SOME IMPORTANT QUESTIONS.

Prof. W. A. Henry, of the Wisconsin Agricultural College, has prepared a series of questions to be studied and answered by the students, of which the following on feeds and feeding are a good illustration. It would be a good practice for any farmer to see how many of these questions he could answer:

Is buttermilk as useful as skim milk for feeding pigs?

In addition to pasture, how much hay and grain is required to keep a cow a year?

State the ration for a German cavalry horse.

fattening lambs? How much more feed do fattening

pigs require in winter than in summer? At what age is the dairy cow at

About how much gain do fattening

lambs make per day? How can we tell new-process from

old-process oil meal? Which will produce the most milk when fed to the dairy cows-an acre

of corn put in the shock, or an acre of corn put in the silo? Is wet feed as satisfactory for pigs

as dry feed?

At what time should corn be harvested to give the largest returns of nutriment?

What part of the gain made by fattening steers is fat?

Do barrows fatten faster than sows? Does sweet skim milk cause pigs to gain faster in weight than sour

skim milk? Is bran as good feed for fattening pigs as middlings?

How much grain will an acre of

pasture put on steers in one season? Does soaked corn give better returns than dry corn with steers?

Describe how to make hay tea for

Is beef pulp a good stock feed? Does the cost of gain with fattening steers increase with the length of the fattening period?

What were the results of the World's Fair test with dairy cows? Is millet huy a good feed for horses

State the maintenance food reuired by breeding ewes in winter. About what value have artichokes for feeding pigs?

What effect does cotton seed mea have on butter fat?

State the advantage of feeding bone meal to hogs living on corn. Is overripe crimson clover danger-

ous to horses? Is corn smut poisonous to dairy cattle? State the effects of age on the gains made by fattening steers.

Does it pay to feed corn to steers while on pasture? What do calves weigh at birth? Is spontaneous combustion possible

with clover hay? Does it pay to feed the condimental

foods to stock? Are brewers' grains a good feed

for dairy cows? How much water does a cow drink

in a day? What part of the nutrients of corn crop are the stalks?

Can cows be kept for several week on corn meal as the sole feed?

SOME TRUTHS IN PIG FEEDING.

The Maryland Experiment Station publishes the following conclusions drawn from its pig feeding experi-

1. It was found that with some rations the gain on pigs could be pro-

duced as low as 21/2 cents per pound. 2. In all the tests where properly compounded rations were used pork was produced at a profit when the pigs were not allowed to become too

3. The cost of producing a pound of pork increases with the age of a

The aim should be to produce from 150 to 200 pound pigs at six to seven months old for the greatest profit.

5. Skim milk was found to have a feeding value for pigs equal to fully double the price charged at most of the creameries of the State.

6. Separator skim milk at 1/2 cent per gallon and linseed and gluten meal at \$15 per ton have about the same value for balancing rations for pig feed.

SOFT COAL AND SALT FOR SWINE.

Too much soft coal and salt is in jurious to swine; it makes boneweakness. It is like feeding sulphur when the animal gets wet; they show lameness right away. Burnt coal ashes are better than the coal itself. A little once in a while is all right.

Too much salt will hurt the swine also, as it makes the entrails rotten. Any one can see this when a hog is slaughtered. When so many white spots appear on the entrails too much salt is to blame. Always when you salt the hogs stir it in the slop.

Wood ashes are excellent for swine. Always keep some before them. More swine die from improper feeding than disease.-Mrs. Lizzie Holderly, McLean Co , Ill.

Friends of oleomargarine are furnishing the strongest indictment against it. They claim that the in dustry would be ruined by the Grout bill, although that bill actually re- bit. Presently the bees will gather How many pounds of grain does duces the tax on it, ex ept when col- in a clump on a tree or bush, and it it require for 100 pounds of gain with ored to imitate butter. It looks as though its friends wanted free fraud in dairy products.

Horse Owners Should Use

GOMBAULT'S Caustic Balsam The Great French Veterinary Remedy.



SUPERSEDES ALL CAUTERY OF FIRING Impossible to produce any scar or blemish. The safest best Blister ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses or Cattle. As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, Etc., it is invaluable. WE GUARANTEE that one tablespoonful of

produce more actual results than a whole bottle of any liniment or spavin cure mixture ever made. Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price \$1,50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address THE LAWRENCE-WILLIAMS CO., Cleveland, Chic

Poultry and Bees.

SUMMER BUILDING.

Correspondence of The Progressive Farmer. the best opportunity in the world to from my hens last winter, and I build model hen houses and to make | want to tell the farmers how I secured preparations for housing more chick- it. I had an acre or two of cow peas ens next winter. One of the great- sowed near the buildings. In conest drawbacks to the inexperienced sequence of scarceness of labor, I in poultry raising is their inability was unable to get all the peas gathto understand that to increase the ered-in fact, a large part of them number of chickens even by a small remained. I decided to let vines and number requires also extension in peas die down on the land and lie the yards and buildings. No young there all winter. The hens soon beginner deliberately goes into found the peas and they literally crowding the poultry into too small lived on the patch until spring, and space. The danger of that is known, gave up eggs in quantity all the but gradually the poultry increases, time." This report as to the value and provisions have not been made of cow peas as a winter feed is conto accommodate them, and before firmed by a report from a gentleman one hardly realizes it the proportion in Maryland who followed the same between the two is strained. Then plan. His hens harvested the peas comes all the trouble that generally from a plot of land last winter, with follows in the wake of overcrowded the result that he had eggs when vards and houses.

ing and planning times During the low peas to hens, as their richness pleasant weather one can construct in protein indicates that they should new houses for new colonies. It make eggs. If you have no cow should be a part of the business to peas, and even if you have the peas, increase the number of flocks every | we would advise the feeding along year. Add at least one more flock with them of wheat, oats, buckwheat or colony each winter, but do not and corn mixed for one feed per day increase the number in each colony. with a hot mash in the morning dur-This means an extra poultry house, ing cold weather. Cow peas may with running yard and all the other largely take the place of cut bone if equipments. That, however, is the you have them. Cut bone and meat only way that one can increase the scraps should, however, be fed twice profits. First make the two or three a week. With such feeding, good, colonies pay. Then add to them dry, warm houses and young, healthy more each season, conducting ex- flocks, eggs should be plentiful all actly upon the plan found most profit- | through the winter-that is, assumable with the others.

winter quarters for the birds, or breed.-Poultry Advocate. some more economical way of building. In running a large poultry farm economy of time and labor are important factors. Some times these are the most important, and they must be considered carefully in every move made. Therefore, when we plan for new model hen houses every simple device that will save either time or labor should be conof time and labor in the poultry busi-

ANNIE C. WEBSTER. THE CURIOUS PROBLEMS OF SWARMING

Swarming is apt to trouble the beginner in bee-keeping, but, when the matter is properly managed, it is not very bothersome. This is the method adopted by the insects for

plan of the yards and buildings.

multiplying their colonies, inasmuch as it is obvious that a given number of hives cannot indefinitely accommodate augmenting numbers. Nobody knows exactly what starts the bees to swarm, but suddenly an excitement will seize the workers who happen to be at home, and they will rush forth, accompanied by the old who need it. queen. When a swarm is seen issuing or in the air, it is best to wait a will be easy to shake them into a new hive, or into a basket, from which they may be poured out in beans. Bees are usually in a peace able mood when swarming, but one should wear a veil as a precaution mer one year for \$1.85. Or on the and use the smoker to gaell them in | two books we make thiscase they show anger. Smoke is the

stantly to cow the bees in case they at empt to rebel. be avoided bp clipping one wing of the laying queen, so that when the bees swarm she cannot go with them, but may be caught at the entrance. The swarm will immediately return to the old home, where an empty hive must have been substituted for the original hive. Into

bee-master's whip, and serves in-

this the swarm will enter. A beginner in bee-keeping cannot do better than obtain from the Department of Agriculture its recent publications on that subject, written by Mr. Frank Benton, one of the assistant g vernment entomologists .-Rene Bache, in Saturday Evening

During the past week, says Southern Planter, a subscriber called on us and in the course of conversation This season of the year one has said: "I had a wonderful egg yield none of his neighbors had any. We Spring and summer are good build- have before advised the feeding of ing that you are keeping a good lay-There should be improvement ing variety, such as Leghorns, Plyupon the new hen houses built this mouth Rocks or Wyandottes. We year, for surely experience, study have found that crossbred hens—the and observation have taught us product, for instance, of a purebred something new. We must have Leghorn rooster on Plymouth Rock found some way of improving the hens-are better layers than the pure

> Principles of Agriculture. By Prof L. H. Bailey, of Cornell University. Handsomely illustrated. 300 pages.

average North Carolina farmer can anywhere invest \$1.25 to better advantage than by sending that sidered, and, if wise, adopted. Some amount to us for a copy of Prof. L. times a very simple automatic feed- H. Bailey's "Principles of Agriculing device will save hundreds of ture." This is a work which tells hours of work in the winter season. | the "whys and wherefores"-the Likewise, a proper ventilating de- principles-of the "business" of vice which will enable the owner to farming. It is written by a man of open or close a dozen doors at once great ability who knows his subject will some times save the owner so | by long years of actual experience much time and labor that he can dis. | and scientific study. The farmer pense almost with an extra hand. who secures a copy of this work We must make a study of economy and studies it during his spare moments this summer will not only ness as never before, and a good deal | find much pleasure thereby, but will of this will depend directly upon the find greater interest in his work, a broader view of his profession and the probability of making many more dollars as a result of his study. There are many books upon the market, but not for many years, we firmly believe, has one been issued which the average reader of this paper so badly needs. The work is handsomely bound, well illustrated, clearly printed and contains 300 pages. Send us \$1.25 and get a copy.

A SPECIAL PRICE.

Fertilizers. By Edward W. Voorhees, Professor of Agriculture in Rutger's College and Director of the New Jersey Experiment Station; 335 pages. Price, \$1.

Thousands of dollars are wasted every year on fertilizers unsuited to the land to which it is applied, which front of the new hive like so many money might be saved to the farm ers by reading this book,

tilizers," with The Progressive Far-

The Progressive Farmer 1 year \$1,00 Ly Atlanta, 1 S A L Ry. Bailey's "Principles of Agricul-All trouble about swarming may Voorhees' "Fertilizers"..... 1.00

> 96 MCR
> 50 MCR
> 42 MCR

MILLIONS OF ACRES fenced with them this year. The fences that grow more popular every season. saving, service and satisfaction in **Ellwood Steel Wire Fences**

Fully guaranteed. Best steel and galvanizing. If you can't find our local agent write to American Steel & Wire Co., Chicago or New York. Ar Philadelphia, P.R.R. Ar New York, P.R.R.

VALUABLE FARM BOOKS.

We really do not believe that the

We guarantee satisfaction. We have now decided to send a copy of this valvable work and a year's subscription to The Progressive Farmer to any address for only This offer is made at a sacrifice in the hope of placing the work in the hands of more of the thousands

We will also send a copy of "Fer-

SPECIAL OFFER: We will send

All for \$2.80.

URABLE and satisfactory painting is ARMSTRONG & McKELVY BEYMER-BAUMAN possible if you will be guided by DAVIS-CHAMBERS Pittsburgh. Pittsburgh. the experience of practical painters Cincinnati. which has proven that the only paint which will give permanent satisfaction is Pure "old Dutch process" White Lead.

Chicago. If any shade or color is required it can be St. Louis readily obtained by using the National Lead JOHN T. LEWIS & BROS CO Company's Pure White Lead Tinting Colors Cleveland.

Buffalo.

ANCHOR

ECKSTEIN

ATLANTIC

BRADLEY

BROOKLYN

SOUTHERN

SHIPMAN

COLLIER

MISSOURI

RED SEAL

SOUTHERN

MORLEY

CORNELL

KENTUCKY

SALEM

JEWETT

ULSTER

UNION

color will be mailed free upon application. National Lead Co., 100 William Street, New York.

The brands named in margin are genuine

Pamphlet giving information, and cards showing sample of the

The BEST Threshing Outfit for a thresherman to buy and for a farmer to use is the Farquhar Celebrated Ajax Threshing Engine and the Farquhar Separator. Engines made in sizes in particular to the farquhar separator. Engines made in sizes in particular to the second develop more than rated horse-power. Have driver's seat, foot-brake and two injectors. Separators of all styles and sizes for merchant threshing or farm use. Farquhar machines have all late improvements, they thresh and clean all kinds of grain perfectly. Catalogue of Engines, Threshing Machinery, Saw Mills and Agricultural Implements FREE. FAROUNAR BOILER ever exploding. A. B. Farquhar Co., Ltd. York, Pa.











TRAINS DOUBLE DAILY SERVICE In Effect May 26th, 1901,

Lv New York, PRR. 230 a m v Henderson 3 46 a m Ly Southern Pines, " 5 37 a m Ar Jacksonville, 5 40 pm No. 31 Lv New York, NYP&N. .13 00 p m

Henderson 7 20 pm 11 2 a m Macon, Cof Ga ... Montgomery, A & W P... 9 20 p m 6 3 + a m New Orleans, Lat N Nashville, N C & St. L Ar Memphis, 400 pm 825 am

NORTHWARD. Ly Memphis, N C & St. L. 12 15 noon 900 pm 130 pm 830 a m v Nashville Ly New Orleans, L & N. . 801 p m Ly Mobile, N & N. 23) a m Ly Montgomery, A & W P. 620 a m 130 p 800 a m° 420 pm Ly Macon, Cof Ga. 9 40 31 70 12 00 noon 8 00 pm 248 pm 1123 pm Ar Greenwood, " 5 (I p m 201 a m Ar Chester 43 a m v Charlotte " 7 25 a m 5 2) a m v Wilmington," v Hamlet. 10 35 p m Ly Southern Pines." 9 93 a 10 11 28 p m Ly Raleigh, 129 pm 1130 am 250 am 105 pm Ar Henderson. Ly Norlina, S. A. L. Ry 3.34 a m 2.00 pm Ly Weldon 4 4 1 a m Ar Portsmonth 7 UU a m Ar Washington, N&WSB. Ar Baltimore, BSPCo... Ar New York, O DSSCo. Ar Philadelphia, NYP&N, +546 pm Ar New York, 840 pm 800 am No. 31 No. 66 Lv Tampa, S. A. L. Ry., 8 00 p m 8 00 a m Ly Jacksonville, 10 10 a m 210 pm 1145 pm Ly Savannah

12 pm 440 a m

129 am 1042 am

250 am 1158 am

35 am 1243 pm

549 am 247 pm

632 am 331 pm

11 25 am 11 25 pm

136 pm 256 a.m

10.35 p.m

11 28 p m

10 10 a m

8 (0) a m

8 49 a m

705 pm

v Columbia,

Ly Henderson.

Norlina.

Ly Petersburg,

Ar Richmond.

v Southern Pines"

Ar Washington, PRR.

Ar Baltimore, PRR...

Ly Hamlet.

Ly Raleigh,

MA.-ALA. BUSINESS COLLECE, Macon, Ca.

GUARANTEED \$5,000 DEPOSIT R. R. FARE PAID 200 FREE Scholarships offered Write quick to

JOKE NO

PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH Grow Grasses and Raise Cattle

high rank North Carolina takes in yield per acre of grasses and forage crops, Com pare her advantages for stock-raising with

those of other States. Profit by these facts.

Grow grasses: raise stock. And whether you

have few animals or many, you cannot afford

Grasses and Forage Plants of the South

RY J. B. KILLEBREW, of the University of Tennessee.

It is a complete manual of the culture of grasses and forage plants of the South. It contains about 140 pages, and is written in a style to be understood by everyone.

The book discusses the character istics of the principal prasses, the maintenance of pastures and meadows, leguminous forage plants, wild pastures, etc. It is fully illustrated with original analytical engraving by Scribner, our greatest grass expert, and embellished with a large number of half tone cuts of field

Killebrew's former work on grasst is now entirely out of print and brings \$3 a copy. This new book con tains all the information in the former work, re-written, and embodies the results of twenty years' additional experience of the writer and all the information abtained by the experiment stations and the United State? Department of Agriculture.

We have 80 copies this valuable work on hand, and, until further notice, will send one copy of "Killebrew's Grasses and Forage Crops" to any ad-

dress for only 25 cents. Or one copy Free as a premium for \$1 in new subscriptions to The Progressive Far-

Or one copy with The Progressive Farmer one year to any address for only \$1.15. Address all orders to

The Progressive Farmer

RALEIGN, A. F.