

SCENE ON THE WAGON ROAD

THE San River reclamation project in Arizona, the greatest ever undertaken by the government, involved the solution of problems of stupendous magnitude. Some of these concerned the building of the Roosevelt dam, which was opened recently by the former president, for whom it was named. In order to render the dam site accessible and to convey to it the vast amount of material needed the engineers were compelled to build a remarkable wagon road, the construction of which involved 40 miles of rock blasting.

KANSAS FARM LANDS

Values Greatly Increased in Last Ten Years.

State Makes Very Favorable Showing in Agricultural Statistics Just Issued—Smaller Farms Have Diminished.

Topeka, Kan.—The United States census bureau has just issued the agricultural statistics for the state of Kansas, as collected at the thirteenth decennial census of last April. The figures are given out a year after the date when they were collected, but the time of the census bureau has been devoted principally to population statistics since the work of taking the census was completed.

Kansas makes a very favorable showing in the agricultural statistics as just issued. The total value of farm lands increased three-fold in the decade from 1900 to 1910, or over \$1,600,000,000. Owing to the increase in population and the advances in irrigation, the farmed area increased during the period by four per cent. There are 4,000 more farmers in the state than ten years ago, more farms, more tenant farmers and more farm owners. The number of farm mortgages is about the same, which does not mean that the farmers are no richer than ten years ago, but, on the contrary, that they have been increasing their holdings and placing improvements on their farms. Perhaps a few farm mortgages may be due to autos, but the number is probably not large.

During the ten years the number of smaller farms, with the exception of truck patches, has diminished. Over one-third of the farms of the state are 175 acres and over. The number of negro and Indian farmers is decreasing. The farmers of the state spend less for farm fertilizers in 1910 than in 1900, but this is probably due to better conservation of the fertility of their farms and the use of barnyard fertilizers.

Statements relative to the acreage of crops and the yields will be made later by Census Director Durand as the tabulation of this data has not been completed.

The principal rates of increases in Kansas in 1910 as compared to 1900 are: In the total value of all farm lands alone, 188 per cent.; in the average value per acre of farm land alone, 178 per cent.; in the total value of farm land and buildings, 169 per cent.; in the average value per acre of farm land and buildings, 159 per cent.; in the total expenditures for labor, 90 per cent.; in the total value of farm buildings alone, 79 per cent.; in the total value of all farm implements and machinery, 64 per cent.; in the total improved farm acreage, 19 per cent.; in the total farm acreage, 4 per cent.; in the whole number of farms, 2 per cent., and in the average acres per farm, 1 per cent.

The only decrease during the decade occurred in the total expenditures for fertilizers, 72 per cent. The statement shows in detail that the number of farms reported in 1910 was 177,299, as compared with 173,098 in 1900, an increase of 4,201, or 2 per cent.

TRAMP RESCUES HUNGRY DOG

Thousands of Well-Dressed and Evidently Well-Fed Pedestrians Pass by Soulful-Eyed Canine.

Chicago—Like "you Cassius" he had a lean and bony look, and until a playful wind blew him off his "pins," West Madison street pedestrians jocularly referred to him as "Romeo with the soulful eyes."

When he lay in the street, with his paws limply hanging over the curb and his body ribs advantageously displayed through his muddy white skin, a crowd gathered round him and "Romeo with the soulful eyes" was given food in the form of ham and beef sandwiches bought at a nearby restaurant.

Whatever Romeo's thoughts were, he was too weak to utter them, even in everyday dog language, and the stumpy tail moved ineffectually back and forth and the ham and beef sandwiches remained untouched. Romeo was too far gone to eat. Romeo was

The total value of farm lands and buildings was given in 1910 as \$1,733,653,000, as against \$643,653,000 in 1900, an increase of \$1,090,000,000, or 169 per cent.

The total value of all farm land alone was reported in 1910 at \$1,534,552,000, as compared with \$532,188,000 in 1900, a gain of \$1,002,364,000, or 188 per cent.

The total value of farm buildings alone was given in 1910 at \$199,101,000, as against \$111,465,000 in 1900, an increase of \$87,636,000, or 79 per cent.

In 1910 the value of the farm land alone constituted 89 per cent. of the total value of land and buildings, as compared with 83 per cent. in 1900.

The reported value of farm implements and machinery was \$48,244,000 in 1910, as against \$29,491,000 in 1900, a gain of \$18,753,000, or 64 per cent. The total acreage reported in 1910 was 43,261,000 acres, as compared with 41,663,000 in 1900, an increase of 1,598,000 acres, or 4 per cent.

The improved acreage was returned in 1910 as amounting to 29,858,000

CUPID BUSY AT BRYN MAWR

Girls Deny New York Clergyman's Assertion They Are "Puffed Up"—Forty Per Cent. Marry.

Philadelphia.—The New York clergyman who recently declared that only an infinitesimal percentage of the graduates of the big women's colleges were able to find husbands is refuted by the statistics issued by Bryn Mawr college, it is asserted here.

Figures in the annual register of alumnae and former students show that 28.4 per cent. of the entire graduate body, numbering 2,724, have married, while of three classes graduating since 1889 more than 50 per cent. are married, and of seven other classes, also since 1889, nearly 40 per cent. have been wedded, a general average of about 40 per cent.

The New York clergyman declared that graduates of women's colleges were "incompetent in the domestic arts, puffed up with a little superficial knowledge and entirely too expensive a luxury for the average man to undertake to support." This assertion the Bryn Mawr girls indignantly deny and point to the statistics to bear them out.

DOG CATCHER USES AIRSHIP

Hopes With Aeroplanes to Trap Stray Canines That Have Become Wary—Has Amassed Fortune.

Montclair, N. J.—David Steinfeld, who is official dog-catcher in ten towns in Essex, Union and Morris counties and who has amassed a small fortune from his work, announces that he has awarded a contract for a small aeroplane and a large net for use in his work. He adds that he will try it on the stray and unlicensed dogs in Montclair first.

Steinfeld has been hunting dogs so long in the three counties that the animals recognize him half a mile away and rush for shelter long before he gets within striking distance.

acres, as against 28,041,000 in 1900, an increase of 4,817,000 acres, or 19 per cent.

The improved acreage formed 69 per cent. of the total acreage in 1910 and 60 per cent. in 1900.

The average acres per farm reported in 1910 were 244, as against 241 in 1900, an increase of three acres, or 1 per cent.

The average value per acre of farm land and buildings in 1910 is stated as \$40.07, as against \$15.45 in 1900, a rise of \$24.62, or 159 per cent.

The average value per acre of farm land alone in 1910, was reported as \$35.47, while in 1900 it was \$12.77, the amount of gain being \$22.70, or 178 per cent.

Of the whole number, 177,299, of farms reported in 1910, there were 175,818, or 99 per cent., operated by white farmers and 1,481, or 1 per cent., by negro and other non-white farmers, as compared with a total of 173,098 in 1900, of which 171,232, or 99 per cent., were conducted by white farmers, and 1,866, or 1 per cent., by negro and other nonwhite. The increase in the number of farms of white farmers during the decade amounted to 4,336, and the decrease in the number of farms of negro and other nonwhite farmers to 135.

He has repainted his wagon, put on false wigs and whiskers and resorted to other expedients in his efforts to fool the unlicensed dogs, but without avail. Now he says he will try the aeroplane, soar a few feet above the ground, load his machine with fresh beef bones, and then, after all the dogs assemble beneath his machine, drop the net over them and alight and separate the licensed from the unlicensed dogs.

FLYING TESTS FOR BERLIN

Airships Will Start and End Summer Competition at German Capital—Limited to Germans.

Berlin.—A great flying competition, limited to German aviators, will take place early in the summer. The flight will be over a circuitous course beginning and ending in Berlin and will include Magdeburg, Hamburg, Bremen, Dusseldorf and Dessau. The decision to hold the contest is the result of the failure of plans for a joint competition by French and German flyers caused by the objections of the chauvinists.

Withdrawal of the French aviators aroused much bitterness in Germany and the officials of the Aviation Engineers' Verein, who are in charge of the preparations, are on their mettle to make the independent competition a brilliant success. The contest has unique interest from the fact that special attention will be paid to the military phase of aviation. It is proposed to offer a special prize for machines carrying two passengers, so as to admit of their taking military observations.

Zeppelin to Carry Passengers.

Dusseldorf, Rhineland Prussia.—Count Zeppelin's dirigible balloon Deutschland II arrived today from Frankfurt-on-the-Main and will be stationed here permanently to carry out the contract with the municipality for passenger flights.

BIGGEST SHERIFF IN WORLD

He is 6 Feet 7 Inches Tall and Weighs About 440 Pounds—More Popular as "Big King."

Atlanta, Ga.—Certainly not the least among the city's prominent guests last week was W. B. King of Anderson, S. C., widely known as the largest sheriff in the world. Looming 6 feet 7 inches in the air, tipping the beam at the 440 mark, he was making big fellow delegates look like Lilliputians, and even the bulk of the nation's chief executive sank into insignificance beside the embodiment of the majesty of Carolina law.

Up in Anderson the sheriff is familiarly known as "Big King" to everybody, and he accepts his nickname with a ready good nature which has made him the friend of all. That his constituents do not think his size affects his ability as sheriff is shown by the majorities which he always receives at election time.

Mr. King visits his friends here several times each year.

RECORD LAMBS' PEDIGREE IN PRACTICAL MANNER

Far More Satisfactory and Businesslike to Keep Numbers in Black and White Than to Rely on Glib Tongue of Sheep Breeder.

The writer visited a pure bred flock not long ago where the lambs were not marked and where the owner relied on his memory alone to tell him the pedigree of each lamb. This particular flock was small and the owner's memory above the average; he did appear to really know his lambs; but for the most part it is obvious that a written record is a great deal more reliable proof of pedigree, says a writer in the Farm, Stock and Home. It is a mistake for anyone handling pure-breeds not to number his lambs and keep a record of them. It is more businesslike, to say the least, and certainly more satisfying. One would feel much more certain of a lamb's pedigree if he saw it in black and white in a book than if it were related by the glib tongue of the owner.

About the surest as well as the simplest method of marking is that of notching the ear. Metal ear tags for the most part have the habit of pulling out, in which case their efficiency can be valued as nil, but the notch if made with the right sort of instrument is there to stay. When made with a round ear punch, the two sides of the notch sometimes tug together but when made with a tug punch, the opening in which is nearly an inch long and about a quarter or three-eighths of an inch wide, they are there to stay.

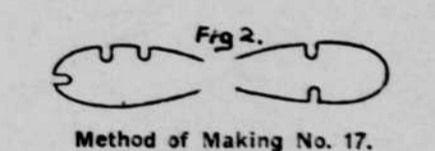
In notching some arbitrary value must be placed upon a notch placed in a given position in each ear. Experience has shown that any number can be most easily made when the following values are used:

One notch in top of left ear indicates 1 unit. One notch in bottom of left ear indicates 1 ten; 1 notch in tip of left ear indicates 1 hundred; 1 notch in top of right ear indicates 3 units; 1 notch in bottom of right ear indicates 3 tens; 1 notch in tip of right ear indicates 3 hundreds.

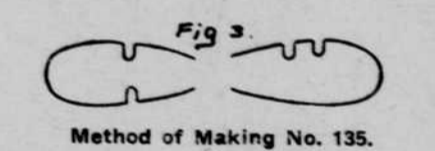
The accompanying illustration may help to make this clearer.



Suppose, now, that one wanted to make the number 17; this is made up of 1 ten, 2 sets of 3 units, and 1 unit. The notching would then be as follows:



Or if one wanted to represent 135 which consists of 1 hundred, 3 tens and 5 units, he would use the following marking:



One ought, of course, always to aim to use as few notches as possible; that is, in notching five, for instance, to use one notch to represent three of the units, and two but two single unit notches. Two less notches are thus used, than if the five were conceived as consisting of five single units. While it seems a simple matter to make the numbers up to the

best advantage, yet it not infrequently proves quite a little confusing and one ought to take a sheet of paper, and make a drawing of each number he wants to represent before he makes any notches. Then if as he numbers each lamb he writes down the name or number of the ewe after the proper illustration, he can complete this record simply by adding the name of the sire, and the date of the lamb's birth. Such information copied and filed neatly away will prove very valuable to him. It will be a great deal more indisputable than would a statement made from memory.

PROTEIN FEED IS DEFINED

No Word in Agricultural Etymology Is So Often Encountered and Most Frequently Used in Articles on Food.

(By CHARLES C. WENTZLER.)

No word in agricultural etymology is so often encountered as protein. To a person not versed in farm chemistry the term is more or less confusing and to many others it has no meaning at all. To such people it is just an empty, technical phrase.

The word is most frequently encountered in articles on feeding.

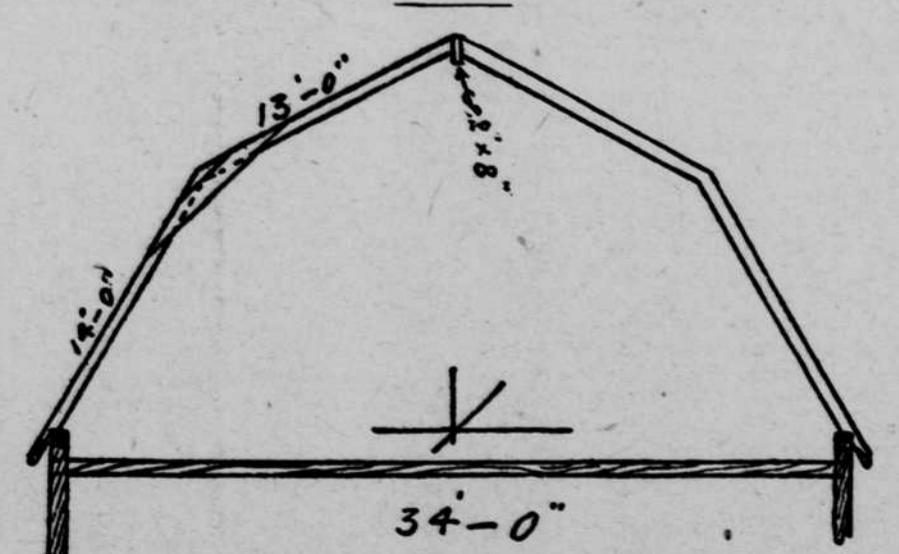
Protein is the opposite of fat. It is about the same as albumen. In feeding we have two principal classes of foods. One is the carbonaceous or starchy foods. These go to fat. The other is the protein foods. These go to make milk, eggs and meat. The protein foods are tissue builders.

In balancing rations we have to see, therefore, that the animal does not get too much of one kind of food. In feeding a cow, for instance, we cannot feed her corn alone as this goes to fat rather than to milk. There is some protein in corn but not enough. On the other hand it would not be advisable to feed a cow food like alfalfa, whose content is practically all protein. To begin with fat is the principle on which an animal depends for bodily heat and energy. So a cow, for this reason alone, should have corn or other grain or hay in which there is starchy matter. Then, too, she needs some carbonaceous food for the milk as there is considerable fat and sugar in milk.

If, however, we feed too much protein some of it is bound to go to waste. She will use half of it for maintenance. One quarter of it goes to milk. From the other quarter her digestive organs extract the fatty principle if there is any; if not some is held by the system in reserve; the rest passes out of the system.

Of course, in feeding, we have to be guided some by temperament, individuality, and other conditions including metabolism. Metabolism is the way the food is assimilated, or rather, it refers to the chemical changes that the food undergoes in the stomach. We can't say here is so much corn and depend that it will make just so much fat or feed so much protein with the idea that it will be converted into an equivalent amount of milk. Some of the fat-making elements may combine with still other elements and be converted into meat while the protein may be converted partly into fat.

STRENGTH OF GAMBREL ROOF



A gambrel roof will be sufficiently strong for a barn 34 feet wide. Use 2-inch by 6-inch by 14 feet for first rafter. From plate to hip of this rafter is 12 feet 6 inches. This rises 11 feet above plate and drops in 6 feet. This leaves a span 22 feet. Use a 2-inch by 6-inch by 13 feet, giving about

a 7-foot rise and put in a 2 by 8-inch plank for ridge. Use a 1 by 8-inch board and spike on at hip as shown in plan, at each side of rafter. You can get two pieces out of a 1 by 8-inch by 14 foot board. This will run about 4 feet each way from hip. This will carry hay fork or sling.

SHELTERING HOGS IN HOT WEATHER

Shade May Be Provided for Swine by Turning Them Into Wood Pasture or Orchards, or by Erecting Shed.

(By WILLIAM F. PURDIE.)

I provide shade and shelter for my pigs by turning them into a wood pasture or the orchards or by constructing a shed. This is done by setting some posts to support a roof of rough boards. The pigs seldom hurt the orchard if they don't run in more than a month or two during the hottest weather.

Sometimes where there are but few trees in the orchard it is not best to let the pigs run there too long as they may kill some of the trees by rubbing and gnawing them off. If they start at this I turn them out and provide artificial shade. But, I furnish them shade of some kind and have abolished the dirty wallow holes. Shelter is also needed at certain

times. There are always a few wet and cold spells every summer when the pigs will suffer if they don't have good shelter and they can easily get a set back during a cold rain that will take them a long time to recover from.

When to Spray.

The proper time to spray fruit trees can be determined only by watching the fruit buds and weather. The first application should be made before the first rain after the blossom buds have been exposed, but before they have opened; the second after two-thirds of the petals have fallen, being sure to get the mixture on ahead of the rain; and the third about two weeks later. Watch the fruit buds and the weather.

Paraffin Killed Woolly Lice.

An English fruit grower declares that he has been able to preserve his apple trees from the woolly aphid by scraping off the loose bark and applying a thin coat of paraffin. Each tree requires about one pint of paraffin and the application is made three times a year.

THE NATURALIST

By LAWRENCE ALFRED CLAY

Miss Gertrude Ainsley put on her hat that sunny spring day and walked down the road and over the creek and up into the woods on the hill. There were stately elms and beeches and maples; the spice-bush gave out its scent; there were violets under foot everywhere, and the robins and bluebirds seemed to welcome an intruder. There were paths running here and there, and as the girl took one of them she heard a queer sound from the brush on her right, and investigated to find a rabbit caught by the leg in a snare.

Poor Bunny was having a hard time of it, and it frightened him the more as the girl approached. He bounded this way and that and into the air, but the snare held and he cried and whimpered and feared for his life. When the girl had come closer and began to call him poor thing and exclaimed that it was a burning shame, the captive huddled down and stared at her with his great big eyes. She was stroking it with her hand when a boy of twelve came running to shout: "He's mine! He's mine! I set the snare for him last night!"

Up he came, and was about to lift the rabbit in his arms when Miss Gertrude gave him a push and demanded: "What business have you snarling the poor creature?"

"Business! Business!" he repeated. "Why any one can catch rabbits any time they want to! He's a daisy, and the fellow will pay fifty cents for him. Gee, but I'm in luck!"

"What fellow, as you call him?" "He's at the tavern. We wants me to catch all the rabbits and quails and birds I can."

"Then he's a villain!" "He don't look like one."

"I don't care how he looks! Any man that will hire a boy to trap such poor innocent things as rabbits is a villain, and you can tell him I said so!"

"I will, when I carry this to him." "But you won't carry it! You keep hands off! It shall have its liberty!" "If you let my rabbit go—!" blustered the lad.

Miss Gertrude picked up Bunny, loosened the wire around his leg and



Poor Bunny Was Having a Hard Time of It.

washed while he disappeared in the bushes. Then she said to the boy:

"You call at the house in about two hours and I'll give you the fifty cents, but if I hear of you catching another rabbit, or if you capture a bird of any sort I'll make you trouble!"

"Maybe you own the earth!" called the lad after he was thirty feet away. "You can tell that villain I do!" She hunted for other snares, and she found three and destroyed them. After a couple of hours she started for home. Just as she left the woods she passed a young man entering them. He was well dressed and a stranger, and the manner in which he raised his hat and his deferential bow told her that he lived in the city. He was staying in the village with some relative for a few days, probably, and out for a stroll, the same as she had been.

That evening the boy called at the house. His fifty cents was ready, but he would not accept it. He brought a note to be delivered and he sat down with a grin on his face while Miss Gertrude answered it. It read:

"Miss Ainsley: Your conduct this afternoon in the brow-beating a young employe of mine is simply reprehensible. The terms in which you characterized me are no less so. I have yet to learn that you have been appointed the legal guardian of the birds

and animals in this locality." Then there followed a "sincerely," and the name "Carroll Denton."

"The villain! How dare he!" exclaimed the girl as she looked at the boy.

"He's an awful fellow," was the reply. "When I told him how you bluffed me out of the rabbit up there he just gnashed his teeth. He only wanted five rabbits at first, but now he says he'll catch a hundred. He's cross-eyed and red-headed, and he's got an awful temper on him."

Miss Gertrude was absent from the room four or five minutes, and then returned with a reply for the awful man. It read:

"Sir: I reiterate that you are a villain!"

"That was all. No 'sincerely,'—no 'respectfully,'—no 'your very obedient servant.' Even the initials 'G. A.' were lacking."

Mr. Ainsley was away from home, and when the mother learned what had happened she said:

"You were always that way from a child, and you can't help it, I suppose, but I hope you won't carry it too far in this case. Calling a man a villain is slander, unless he is a villain."

"But of course he is!" was the reply. "Would any one but a villain hire a boy to murder a poor rabbit? If he catches a robin, a blue-bird or a quail I'll—I'll—I'll!"

Miss Gertrude clenched her hands and breathed hard and left it to be understood that something very terrible would happen to the cross-eyed and red-headed man. Next morning she went up to the woods again. She went in the forenoon because she suspected that boy would set snares over night and visit them early. She walked the paths and found four, and the wires were thrown far away. They had snared no victims.

As she was on her way home she met the young man of the day before. She looked at him more closely this time, and she liked his appearance. Surely he was a gentleman. The boy was not seen until mid-afternoon. Then he brought another note, and as he delivered it he said:

"I was lying up there in a brush-heap this forenoon when you destroyed the snares, and oh, wasn't the awful man awful mad when I told him of it!"

And the note read: "Miss Ainsley: I must again politely request that you cease to meddle with my affairs."

The same name was signed as to the other, but the "sincerely" was lacking. Carroll Denton was no longer sincere. He was grumpy.

A reply was sent as promptly as before. It consisted of a few stirring words:

"And I must repeat that you are a villain!"

It was afternoon of the next day when Miss Gertrude went up to the woods again. Almost at once she beheld a robin with a broken wing fluttering about. She had picked it up and seated herself on a log and was crying over it when a soft voice at her elbow said:

"Please give it to me. I think I can do something for it."

It was the young man. He took the bird, made a brief examination and said: "The wing is broken, but I can use splints and make it sound again after a bit. Nature is very kind to animals and birds. Hope that old maid won't hear of this. She'll say I used a club on the bird and call me more villains."

"What old maid?" was asked, forgetting that she was facing a stranger. "A Miss Ainsley. She's close on my trail."

"Why—why, I am the only Miss Ainsley, and I am not an old maid. You can't be—the villain!"

Then of course it came out. The boy had lied for revenge. There was no old maid, and there was no cross-eyed, red-headed man. Mr. Denton was a naturalist, and he wanted his specimens alive and sound that he might study their habits. He was merciful to a degree. Miss Gertrude heard his explanations with blushing cheeks and downcast eyes, and at the end she was generous enough to reply:

"Well, that makes a difference."

And it did. The naturalist found his way to the house to tell her how the robin was getting along, and the day the bird flew away on the restored wing he said to himself that he had discovered a "specimen" worth all others put together.

Without Naming Names.

An alienist says that one out of every 275 residents of this city is insane. And each of the 275 is absolutely certain he knows which one.—New York Herald.

PROFIT IN "BATTLE RELICS"

Greater Part of Mementoes Said to Have Been Found on World's Great Fighting Fields Are Spurious.

A careful observer who has visited many of the world's great battlefields declares that the greater part of the mementoes, of which there seems to be an inexhaustible supply, are wholly spurious; but so well are they simulated that the average visitor is content. Pieces of shell are made by casting hollow spheres and cracking them with a sledge. The fragments are then treated to a bath of diluted nitric acid and allowed to gather rust in the open air.

The appearance of verdigris is easily procured, when desired, by the use of copper in solution. The writer was shown several basketfuls of pieces of shell, all of which seem to be at least 30 or 40 years old. The acid has slightly honeycombed the edges and they looked exactly as if corroded by long burial beneath the soil. Such trifles

as single bullets and minie balls are made with the greatest ease in an ordinary mold. They are dented with a small hammer and given the requisite discoloration by remaining for a few days in a bucket of lime. The more elaborate relics, such as sword belts, spurs, pieces of harness, bayonets, canteens and so on, are turned out by individual workmen, who make a good profit out of the business.

Easily Spared.

A German in a sleeping car was unable to rest on account of the snoring of fellow travelers on each side of him. Finally one of them gave a vociferous snort and stopped still. "Thanks!" exclaimed the wretched German, "you is det!"—The Housekeeper.

Very Well.

"You say she did well?" "Yes, she was engaged to a spend-thrift but married a millionaire."