AGRICULTURAL NOTES.

PRACTICAL INFORMATION FOR THE FARMER AND THE ORCHARDIST.

[This Department is prepared for the SACRAMENTO RECORD-UNION by its Agricultural Editor. All matter relating to the agricultural interest will be found under this head.]

MULCH THE ORCHARD.

The successful orchardist, even in the comparatively damp climate of the Atlantic States, practices mulching his trees for the purpose of keeping the surface of the soil cool and damp, and thus encouraging the vigorous growth of the roots and increasing their capacity to take up nutriment or food for the tree and fruit. It is found that even there mulching is of great benefit to not only the tree and fruit, but to the soil itself. We notice, in a recent discussion of this subject in one of the late meetings of the State Horticultural Society of Iowa, that there was a unanimous opinion in favor of the practice of mulching the orchard. They hold that the orchard soil needs shading in some way, as much as the native forests need the leaf mulch with which nature has provided it. They say the dark-colored soils, even in those damp climates, get too hot if directly exposed to the action of the sun, and many of them practice sowing buckwheat in the orchard for the purpose of shading and keeping the surface cool. If experience has proven it so necessary and important to use these means to keep the soil cool in those climates, how much more such practices must be necessary and beneficial in our dryer climate and on our equally dark and heat-attracting soil? Mulching should be placed around the trees as a rule in this State in the fall, so that it will become set and fixed to the soil by the rains and damp weather of the winter, and begin the process of decay and fertilization. Most any substance may be used for a mulch, with benefit, even chips, shavings, coarse weeds or straw, and half rotted manure. In time, any of these materials will undergo decay, and will keep a constant enrichment of the soil. If, however, the matter of mulching has not been attended to in the fall, it should be done now, and the sooner the better.

Plowing and cultivation of itself constitutes a good mulch in the absence of a better mode. By pulverizing the surface of the soil it is prevented from cracking and heating and drying out, but is not enriched as in the use of fertilizing ingredients, as suggested. We should remark, however, that in the use of half rotted straw and manure, it will be necessary to be careful not to allow the mulch to rest against the stem or body of the tree in such quantities as to induce heating, as this would be very injurious, especially to small trees. In very cold climates the mulch is a protection against frost and freezing as well as against heat and drought. Peat mulch is used when it can be had for mulching, with most excellent results.

KEEPING MILK SWEET.

As the warm season advances those who buy their milk of city dairymen will find it more difficult to keep their milk sweet for use. We make the following suggestions for the benefit of both sellers and buyers of milk: The first condition necessary to secure good, healthy milk, is that the cows be healthy and strong, and that they be fed on perfectly clean and healthy food. Good, sweet hay and bran and water, and a little oil-cake mixed in, is as good feed as cows can live upon to secure good, sweet and healthy milk. Milk produced from such cows, fed on such food, will be rich in cream, will have no unpleasant smell or taste, and will keep a long time before the beginning of fermentation. Good, fresh grass will also produce good, sweet long-keeping milk, but will when first milked, as a rule, betray an offensive animal smell. The first thing to be done, after milk has been drawn from the cow into perfectly clean and sweet vessels, is to air it by pouring it from one vessel to another a number of times, thus giving the animal gases and animal smell an opportunity to escape as soon as possible; and then in an open dish or can set it into cold water. If convenient, the water should be running, so as the more readily and rapidly to carry off the animal heat. When thoroughly cold, and not till then, it should be placed in the milk wagon to be transported to market. Before serving to customers the cream that has arisen on the surface in the mouth of the can should be thoroughly mixed again with the milk, otherwise the customers first served from the can will receive all the cream, and those last served will receive skimmed milk, and will have reason to and will—if they happen to get it in this way a few times—complain. The cream may be mixed in with the milk more handily than in most any other way by pouring back and forth from one can to another. This should be done just before beginning on a new can in the delivery route. Then when the milk retailer has finished his route, if his cans are not to be washed and scalded immediately he should pour cold water into each can and rinse them out well and turn them over on the draining rack until the time they are to be washed and scalded. Every time the cans, are washed they should also be scalded in boiling water and then turned immediately over on the draining rack. Too much pains cannot be taken by the milk vendor to keep every can, every measure and everything used about the milk perfectly pure, clean and sweet. But the buyer of milk has also some things to observe and to do to preserve milk in a good, clean and sweet condition till it is to be used. The first and most important of these things is to provide a perfectly clean and sweet dish to receive and keep the milk in as it is delivered by the retailer. The next is to keep the milk in a clean, sweet and cool place till wanted for use. If a part of that purchased and received at the same time is to be used all at once, or at one meal, it will be as well that it should be received and kept in one dish or vessel; but if it is to be used at different times, as at dinner and at tea, then that to be used at each meal should be placed in separate vessels, so as not to stir or disturb the milk after being set away till wanted for use. Many people who use milk at each meal, say morning, noon and evening, put all into the same vessel and use from it as they want it. This disturbs the milk and hurries fermentation, and the result is that their milk received in the morning sours before tea time. Then they complain of their milkman, that he brings them sour milk, when in fact the fault is their own. When milk is left at hotels and restaurants, to be used as wanted from the cans, the moment one can is emptied it should be filled with cold water, or rinsed with cold water, and then turned up on a drainage rack or board to dry and air. The least particle of sour milk introduced into sweet milk will hurry decay and decomposition, so will dipping into milk, and hence both should be avoided, and the cause of complaint will be to a great extent removed.

PROBABLE LATE HIGH WATER.

There is now a large amount of water in the mountains in the shape of snow and ice. The cold weather has been holding it back, and the rains that have fallen on the snow have been nearly all absorbed by it, till now the great body is in almost as condensed a form as though it were water itself. As the warm weather comes on the snow and ice will continue to condense and pack till freezing nightly shall cease. This will be late in the season—it may be even in June. But whenever this does occur the ice will dissolve rapidly and send the water down to overflow the valley and river lands. We have known the rivers to overflow so late in the season as to flood and destroy crops of hay standing in the cock, and we think the indications are favorable for such an occurrence this season. While we would like to see the river farmers make good crops, we cannot encourage them to put in seed on lands liable to overflow at a time when their crops of grain and vegetables are half grown. We think those who have alfalfa hay growing on lands liable to overflow may possibly get one crop off before the water comes up the highest, and that it will be prudent to endeavor to do so. This crop is now growing very rapidly, and in many places on the river bottom will be large enough to cut in two or three weeks. It is not likely, however, that the weather will be sufficiently settled to cure the hay cut at that time. We would therefore suggest to those who have stock, that it may be well to cut such hay as soon as it will do and feed it green. Thus they may save their hay and improve the condition of their stock.

OUR LETTER-BOX.

CURIOUS AND STATISTICAL QUESTIONS ASKED AND ANSWERED.

[Correspondents will write upon but one side of the sheet and make their questions as concise as possible. Replies by contributors to questions by correspondents will be given when accompanied by the name and address of the writer.]

EGG-BOX MAKERS.—Mrs. A. McDew Maxwell, Colusa county, desires the address of a firm or manufacturer of egg-boxes for packing for market. Those she wishes are boxes fitted inside with trays arranged to hold the eggs in one position.

SPRINGS.—Can you give me some account of the location of Bartlett Springs and their distance from Sacramento? ELLA.

Answer.—Situated in Lake county, California, on the western slope of the mountain ranges of Cache creek and its tributaries, about 100 miles from Sacramento, via Williams, at an altitude of 2,325 feet above sea level.

IMMIGRATION.—1. When were immigration statistics commenced in the United States? 2. Is it known how many immigrants have come here? 3. How many came in 1879? 4. Where can I get books of information on such subjects?

Answers.—1. In 1820. 2. Yes; 9,942,022. 3. From January to June we have the figures—111,507. 4. The Chief of the Bureau of Statistics at Washington will send you his quarterly report regularly on application.

PUNCTUATION AGAIN.—When should quotations begin with a capital letter? S.

Answer.—Every *direct* quotation, formally introduced, should begin with a capital letter, as: Toward the end of your letter you are pleased to observe: "The rejection of a treaty, duly negotiated," etc.

CONSULS.—Do Consuls of the United States get a salary or live by the fees of office? M. H. T.

Answer.—They get a stated salary, and by law are required to pay all fees into the United States treasury.

CHAIRMAN.—Can you ascertain for me who is Chairman of the Committee on Patents in the present Congress? MECHANIC.

Answer.—Francis Kernan of New York.

INTEREST.—What is the legal rate of interest in Illinois? We have a dispute about it. B. AND P.

Answer.—Six per cent.

EXPECTATION OF LIFE.—May I intrude upon the Letter-Box space enough to ask you to give me, according to the best authority, answers to these questions: 1. Expectation of life at the age of 42 years? 2. Expectation of life at the age of 50 years?

Answer—1. Male, 24 73-100; female, 26 69-100. 2. Male, 19 54-100; female, 20 75-100.

MILLET.—You have had such interesting articles on millet in the RECORD-UNION that I am anxious to know something of its nutritive qualities and what are its chief elements? ZED.

Answer.—Johnson says of millet, that its grain is equal in nutritive value to the average of English wheats. No one can doubt its value after seeing a field of German millet ripe and ready for the sickle. It contains 9 per cent. of nitrogenous matter, 74 of starch and sugar, 2.6 of fat, with 2.3 of mineral matter.

BALD-HEADED BUTTER.—I know it is an odd request, but I have never heard whence came the term, "bald-headed butter," and I have a curious desire to find out. The thing bothers me, somehow, as trivial things often do annoy the mind. Can you satisfy me? W.

Answer.—You shall be relieved. The anecdote is one told of Artemus Ward's visit to England. He had been dined at the Savage Club, and in return invited some of the members to dine with him. Now the great humorist was a poor and a very democratic man, and so chose a rather plain inn for his dinner. The butter brought on the table was not nice. It was, to say the least, suggestive. "Waiter," said Artemus Ward, "haven't you got some bald-headed butter? Take away this butter, and bring me some bald-headed butter." Nobody smiled, no one thought of laughing. The Englishmen went back to their club-room after leaving their host, and began to discuss the great American humorist. Suddenly one of their number sprang to his feet and began to laugh. "O, now, I say, did you 'ear him talk about bald-'eaded butter? Why, he wanted butter without 'air in it, you know." Rather slow are those honest English people to see American jokes; and this is said to be the first laugh that Artemus provoked in England.

THE FARE.—R. D., Sawyer's Bar, asks the rate of fare from Sacramento to Cheyenne, and thence to Deadwood, and the distances.

Answer.—The fare to Cheyenne is $94 50; to Deadwood, $116. We have no table of distances to Deadwood from any point at hand.

REPUDIATION.—Please to give me information by publishing a list of those States that have repudiated State debts, with the month and year of repudiation. S.

Answer.—Could not think of attempting to search for such data. Consult some political almanac or a cyclopædia.

HORSES.—Will you please answer the following questions: 1. Is there any cure for wind-galls on horses? 2. What is the weight of the heaviest draft horses in England? HOLY STONE.

Answer.—1. Yes; it is claimed there is. Think we can furnish you a formula presently. 2. They vary greatly, but rate as high as 1,400 pounds, and have, in exceptional cases, gone to 1,500, and even 1,600, but 1,200 is a fine weight.

CITIZENSHIP.—Do males born in foreign countries, but of American parents, and who arrive in America under age, require to obtain naturalization papers before they are entitled to vote. X.

Answer.—Children born abroad of parents who are citizens of the United States, the parents not renouncing their citizenship, are citizens of the United States, and no naturalization is required when residence is taken up in the United States.

Many of the Irish peasants are now embarking at Queenstown for America, eager to flee from famine and misrule.

OUTDOOR AMUSEMENTS.

ITEMS OF INTEREST TO THE LOVERS OF FIELD SPORTS.

[In this department, as the head indicates, we propose to make record of current sporting events. Communications to the paper concerning such matters should be addressed to the "Outdoor Amusement Department"]

AQUATIC.—The annual regatta of the Pacific Amateur Rowing Association will be held June 12th on Oakland creek. The regatta, in point of entries, promises to be the most successful yet held on this coast. There are representative crews promised from the following clubs: Ariel, Nautilus, Dolphin, Pioneer, Golden Gate and St. George Clubs, and attempts will be made to have a shell crew present from the Willamette Club, of Portland, Or. The single scullers will probably number half a dozen. ....The newest "wrinkle" in boating equipments is the Davis scull blade. From a cut that appeared in a recent number of the New York *Spirit* an idea can be gained of its shape. The blade of the scull is, to judge by our present patterns, most peculiar and eccentric. Instead of the lower and upper halves of the blade being, as they are at present, of equal width, the upper half of the blade is much wider than the lower; in fact, the upper view of the blade forms almost an ellipse. Peculiar advantages are claimed for the new model, particularly at the commencement and finishing of the stroke. Although so original and peculiar in its shape, still the name and well-known ingenuity of its maker will secure the blade a fair trial.—[Olympian.

CHICAGO BICYCLE CLUB.—Scarcely a year ago did the progressive spirit of young Chicago demand a silent wheel upon which to develop its growing tastes for athletic sports and physical exercise. John M. Fairfield supplied the want, and when the young riders first bestrode their noiseless steeds the prejudiced and practically grooved "oldest inhabitant" who came West to grow up with the country scouted the idea of its pleasure or value, and could only look at the bicycle as useless. Not many years ago the same was the case in London. Now thousands of bicycles run all over England, each one with its headlight and bell, recognized and protected by the law. In the Chicago Bicycle Club there are now about twenty members, Messrs. G. L. Craig, of Evanston, and J. B. King, late of the Germantown, Pa., Club, being the last elected, and of these Messrs. McClure, Ayres, Hoffman, Henderson, Brown, Fairfield and Craig make daily use of their machines between their homes and business. So popular is bicycling becoming that the Park Commissioners are about granting them the use of a half-mile path in the park. The petition is now under favorable consideration by the Commission.—[Chicago Field.

MAHOMET AND HIS THREE MARES.—Count Lecoulteux de Canteleu, in an interesting essay in a late number of the *Revue Britannique*, shows up the absurdity of the legend of Mahomet saving himself from assassination by his flight from Mecca to Medina with three mares, for the only animals that he possessed at that time were nine camels, and it was on the back of one of these he escaped. Other writers assert that Mahomet never possessed either a mare or a horse; and it was not till after his death that the Arabians gradually introduced horses into their armies. Thus the Arabs tracing the pedigree of their horses to Mahomet's three mares is a regular humbug. The Dongola horses in Nubia are found to preserve the same characteristics at the present day as Egyptian sculptures and monuments of 2,000 years ago represented them. Geologists assert that these horses show two, and sometimes four, less ribs than those of other breeds. The old Breton horses of France were noted for this same peculiarity. From this it is supposed that the Breton stock came originally from Dongola, brought hither by the Celts probably when they first settled in Breton.

WILLOWS TOURNAMENT.—The Willows *Journal* says: The second annual tournament of the Willows Gun Club on the 13th and 14th of this month will unquestionably be a grand success in all particulars. The arrangements are now completed, and everything goes to show that Willows will be thronged with people, eager to witness the shooting skill of the most noted shots of the State. W. C. Murdoch, President of the Club, received a dispatch on Wednesday from Dr. John Ruth, of Oakland, the champion rifle shot of the world, having eclipsed Dr. Carver's record, which stated that he desired to enter the contest. Mr. Murdoch sent Dr. Ruth word that his name was placed on the list of those who would shoot during the two days. On the last day of the tournament—the 14th—he will give an exhibition of his wonderful skill with the rifle. This will add very much to the attractions of the tournament. The grounds upon which the tournament will take place will be put in proper condition for the shoot. Nothing will be left undone by the Club to promote the enjoyment and pleasure of the guests.

STOCKTON GUN CLUB'S MEDALS.—The Stockton Gun Club closed a series of shooting matches March 31st, which were held to decide who should retain three prizes given by the Club. In order to retain any of the prizes permanently the winner is required by the rules to win it four times. The following is the score made: Charles Rich, 23; C. J. Haas, 18; Alex. Chalmers, 6; D. Klench, 19; F. Hahn, 14; W. E. Saunders, 21; W. H. McKee, 20; J. E. Brown, 17; F. W. Schmidt, 15; Sidney Newell, 14; F. N. Lastreto, 22; Oscar Marshall, 21; A. E. Myers, 20; T. W. Newell, 12. Charles Rich won the first medal, and now retains it, and W. H. McKee won the fourth medal for the fourth time and retains it. At the last meeting held before this one F. Lastreto won the second medal for the fourth time. The Club proposes at the next meeting to prepare three other medals to be contended for by another series of matches.

PROHIBITING POOL-SELLING IN OHIO.—A bill prohibiting the sale of pools on horse races has already passed one branch of the Ohio Legislature. The broad grounds of morality is the web on which it is worked. No bill ever enacted has abolished betting on race courses. Now in regard to betting and pool-selling on race courses there is no question of morals involved. It is just as moral for the man who is not able to own running and trotting horses to bet upon their merits, as it is for the owners to subscribe to sweepstakes and pay entrance money to purses. The whole question is one of expediency and policy. On this matter Captain George Stone, Secretary of the Chester Park Association, Cincinnati, O., thus expresses himself: "If that bill becomes a law, it will simply bankrupt every track association and horse-breeder in the country. Such laws exist in New York and Massachusetts, but they have become dead-letters."—[Exchange.

A NEW ROWING ASSOCIATION.—The Toronto *Globe* says: A meeting of the joint committee of the Toronto and Argonaut Rowing Clubs, with a view to the organization of an "Association of Amateur Oarsmen of Canada," was held at the rooms of the former club March 16th. Letters favorable to the formation of the Association were read from the secretaries of the following clubs, viz.: The Lachine Boating Club, the St. Lambert's Rowing Club, the Nautilus Rowing Club (Hamilton), the Peterboro Rowing Club, the Beaver Boat Club (Windsor), the Forest City Rowing Club (London East), and from Mr. Wells, of Chatham. A committee was appointed to draft a constitution to be submitted at a meeting to be held April 9th, when the Association will be formally organized and delegates admitted.

BILLIARDS.—The final game of the charity billiard tournament in New York was played on the evening of March 29th, and resulted in a victory for Schaefer, who scored 600 points to 219 for Heiser. Schaefer thus wins another championship medal.

PACIFIC COAST ARCHERY RECORD—AMERICAN ROUND.—F. C. Havens, O. B. Club, 88 hits, score 626; E. K. Otey, P. A. Club, 86 hits, score 548; J. A. Cadman, P. A. Club, 86 hits, score 528; R. J. Bush, O. B. Club, 84 hits, score 504; S. L. Strickland, O. B. Club, 86 hits, score 496; C. C. Cadman, P. A. Club, 83 hits, score 461; F. M. Ward, P. A. Club, 82 hits, score 458; George W. Kinney, P. A. Club, 86 hits, score 444; Daniel O'Connell, M. F. Club, 79 hits, score 439; A. W. Havens, O. B. Club, 80 hits, score 430; A. J. Wells, P. A. Club, 79 hits, score 427; T. A. Blackburn, P. A. Club, 81 hits, score 423; J. E. Cook, O. B. Club, 82 hits, score 410; H. Darneal, P. A. Club, 80 hits, score 408; D. H. Ainsworth, P. A. Club, 78 hits, score 404.

THE QUIET HOUR.

THE "TANGLER'S" PARADISE OF CHARADES, ENIGMAS, ETC.

[Contributions to this department should be addressed "Quiet Hour," RECORD-UNION. Write upon but one side of the sheet. Accompany all contributions with the answers, the true name, and postoffice address. Contributors will receive advice and assistance, and are privileged to engage in courteous criticism of the productions published.]

Answers to March 27th.

625.

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            D                 A D           A S
          L E A               N O           D E
        T U N S               I N           E N
      I N A N E               M A           L A
    E M A N A T E             A T           I T
  R E           S T       T E S S A     N O D E S
G E               A R     E D I T S     E R O D E
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626. Mariposa.

627. "I would rather be right than be President."

628.

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L A D R O N E
  A D R O N E
    D R O N E
      R O N E
        O N E
          N E
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629. Vixen, Andover, London, Boston.

630. Inauguration, Grebe.

631. (1) Dern, Etui, Rued, Nide. (2) Anil, Nave, Ivan, Lena. (3) Dere, Eyot, Roun, Etna.

632. Tomato.

New Tangles.

639. Word-square double, by Trinity:

(Up, down, forward or backward.) 1. Gone by. 2. Vivid. 3. Perverse. 4. Cups and saucers. (Four letters per word).

640. Compound diamond, by Amethyst:

Upper left—In Rose; trodden under foot; to undo; a numeral; in Rose. Upper right—In Sibyl; a boy; a part of a garment; moisture; in Sibyl; Central—In Maybell; boy's nickname; used by carpenters; a cave; in Maybell. Lower left—In Myrtle; a color; lawful; boy's nickname; in Myrtle. Lower right—In Solitaire; boy's nickname; a placard; an abreviation for a State; in Solitaire.

641. Charade, by Augusta Blake (dedicated to Rose):

Within a flower-enamelled shade, unconscious of alarm,
One pleasant eve fair Anna strayed, leaned on her lover's arm;
He gently smoothed her flowing hair, which did in tresses shine,
Then pressed her hand and said, "My fair, shalt ever I call thee mine?"
She blushed and gently bowed her head, her eyes beamed lovingly,
Then giving him a flower she said, "Take this, it speaks for me."
If to unite and arrange a color, and a hollow sounding vessel you are inclined.
The name of the flower she gave to him you will find.

642. Hidden towns of England:

(1) The first word my youngest child said was "Ba ba." This pleased me much.
(2) In the State of Domaha stings from vipers have proved fatal.

643. Enigma, by Casper:

My whole of 13 letters is the name of a poet.
My 10, 12 is a common expression.
My 10, 13, 2 is a nickname.
My 1, 7, 8, 13, 10 is a girl's name.
My 10, 6, 3 is a horse.

644. Enigma, by Amy:

An old saying and a familiar one, composed of 29 letters.
My 5, 28, 9, 3, is a bird.
My 10, 9, 1, 23, is to divide.
My 12, 7, 14, 20, 8, 17, is a river.
My 2, 4, 29, 26, 1, 6, 28, 15, 21, is a country theme of many a tale.
My 15, 11, 25, 21, is of no force.
My 16, 3, 15, 27, 8, 10, is a city known to many Californians.
My 13, 26, 4, 27, 21, 15, is the subject of many sermons.
My 22, 18, 24, 4, 12, 24, 10, is a place of action.

I would like to ask Sibyl if she can tell me why, when one Siamese twin died the other died also? If she can I think it will answer one of her questions in a previous number.

645. Charade, by Casper:

My first, a place of perfect bliss;
Once handled by a famous pen.
My second, what is gone or missed;
My whole a hidden diadem.

646. Double diamond, by Hattie Heath:

I. Across—In amethyst; Welsh interrogative; wasted by disease; popular; a brood of birds; made; in union. Down—In record; a plant; called; a drum; shining; hazard; in tangle.
2. Across—In Maine; a tree; a burden; an animal; in Blaine. Down—In night; alienated; a well-known pioneer of Sacramento; a coin in sight.

647. Word squares, by Little Dandelion:

1. A gulf of Africa; to partly slumber; a man's name; close.
2. A household article; a verb; tame animals.
3. Worn on the head; a verb; a number.

648. Charade, by E. C. D.:

Whole—I am prized by one and all, but most when spring is green,
When tints of gold and sunlight blend together in my sheen.
Curtail—And lo, before you in majesty so grand,
Stangely lonely, strangely lovely, awe-inspiring I stand.
Curtail—See how I'm buffeted, how jokers round me press;
And I hold the inspiration that causes my distress.
Curtail—A simple, useful word you'll find me everywhere,
But on the slanderer's renowned tongue I fateful meaning bear.
Curtail again—There's little left, small part of many names,
Though oftenest used by infant tongues in lessons or in games.
Curtail—The head alone is left, yet never quite the head,
But though I yield the foremost place, by only one I'm led.

Answers to Correspondents and Correct Solutions.

Casper—627, 629, 630 (no, sir), 632. Indeed, Casper, you do not understand it yet. We publish answers every week, but in order to give distant contributors a fair opportunity to reply we publish those of the second preceding week.

Junius—630, 631 (in part), 636, 637.

Gus.—By no means.

Eveline—625, 626, 635.

August H.—635 (very good).

Monsieur—It is simply impossible.

Amy—626, 627, 628, 629, 630 to 638 inclusive (we take your word, you see, for 638). Amy says: "I would like to ask Trinity if he is a bachelor? If so, sweet sixteen may take advantage of and claim the privilege offered by his puzzle." Amy must not assume her requests have been coolly ignored. Judgment is exercised in all cases of what is best to print.

Casper—Manuscript received and filed for use.

Dandelion—Though so young, is welcome to the Quiet Hour family.

E. C. D.—Very glad to welcome you back to the old circle; 633, 634, 636, 637, 638 (will take the last for granted as correct).

Ora and Carrie—Manuscript received.

Trinity—626, 627, 628, 629, 630 (no), 632, 633 (again, no), 636, 637—(No; we have curtailed answers considerably in manner of presenting them, to give more room for variety).

Sibyl—626, 630 (no), 632, 634, 635, 636, 637 (good, but wrong). Sybil adds: "Trinity's dedicated acrostic was very nicely woven, and I felt so triumphant when I unraveled it that I immediately began to tangle a tangle for him, but I doubt very much if it makes him much trouble. He advises 'Rose & Co.' to claim their rights under solution of 634. But suppose they have been 'dear little wives' for the past twenty years, could they follow his advice. It is interesting to know he will ever be capital Y-o-u-n-g. And this to Rose:

"If you were Hannah Jane,
Or even Jerusha Hannah,
And I had read your name,
After such sparkle and fun
I'd paint you just the same
As I already have done."

James Gordon Bennett has just purchased a horse in England for $5,000.

THE HOUSEHOLD.

HOME ADORNMENT AND DOMESTIC ECONOMY—ALL AROUND THE HOUSE.

[Correspondents of this department will not be limited in their epistles, but conciseness is preferable, and but one side of a page must be written upon. Questions pertinent to this department will be answered in this column.]

Adaptation of Dress to Complexion.

Rose red cannot be put in contact with the rosiest complexions without causing them to lose some of their freshness; dark red rose is less objectionable for certain complexions than rose red, because, being higher than the latter, it tends to impart whiteness to them, in consequence of contrast of tone. A delicate green is, on the contrary, favorable to all fair complexions, without causing them to lose some of their freshness—those which are deficient in rose, and which may have been imparted to them without inconvenience; but it is not so favorable to complexions that are more red than rosy, nor to those that have a tint of orange mixed with brown, because the red they add to this tint will be of a brick-red hue—and in the latter case a dark green will be less objectionable than a delicate green. Yellow imparts violet to a fair skin, and in this view it is less favorable than a delicate green. To those skins which are more yellow than orange, it imparts white, but this combination is very dull and heavy for a fair complexion. When the skin is tinted more with orange than yellow, it can be made more roseate by neutralizing the yellow; it produces this effect upon the black-haired type, and it is thus that it suits brunettes. Violet, the complementary of yellow, produces contrary effects—thus, it imparts some greenish-yellow to fair complexions, it augments the yellow tint of yellow and orange skins, and the little blue there may be in a complexion it makes green; violet, then, is one of the least favorable colors to the skin, at least when it is not sufficiently deep to whiten it by contrast of tone. Blue imparts orange, which is susceptible of allying itself favorably to white and the light flesh tints of fair complexions, which have already a more or less determined tint of this color. Blue is, then, suitable to most blondes, and in this case justifies its reputation; it will not suit brunettes, since they have already too much orange. Orange is too brilliant to be elegant; it makes fair complexions blue, whitens those which have an orange tint, and gives a green hue to those of a yellow tint. Drapery of a lustrous white, such as cambric muslin, associates well with a fresh complexion, of which it relieves the rose color, but it is unsuitable to complexions which have a disagreeable tint, because white always exalts all colors by raising their tone, consequently it is unsuitable to those skins which, without having this disagreeable tint, very nearly approach it; very light draperies of white, such as muslin, pleated or point lace, have an entirely different aspect. Black draperies, lowering the tone of the colors, with which they are in juxtaposition, whiten the skin; but if the vermillion or rosy parts are to a certain point distant from the drapery, it will follow that, although lowered in tone, they appear relatively to the white parts of the skin contiguous to the same drapery redder than if the contiguity to the black did not exist. By attention to these rules, founded as they are on certain natural laws or principles, harmony and beauty of apparel and complexion are secured.

Receipts.

FISH CHOWDER.—Take five pounds of any hard, white fish, cut into small pieces, and free from skin and bone. Boil and slice eight common-sized potatoes. Fry until crisp four thin slices of salt pork in the kettle intended for the chowder. Take out the pork, slice two onions into the fat and fry brown. Cut into slices two more raw onions, and split open a dozen of butter crackers. Take the onions out of the kettle, pour off nearly all the fat, put in a layer of fish, then a layer of potatoes with some of the onions, both raw and fried, and a little pepper and salt. Repeat until half of the ingredients are used, then scatter over half of the fried pork cut into bits, and cover with a layer of crackers. Layer the remainder of the chowder as before with the pork and cracker on top. Cover once and a half with cold water and boil slowly one hour. Stir in a cup of cream or rich milk just before serving. It is best to use both salt and pepper sparingly while seasoning the layers, as they can be added if needed when done.

BAKED CABBAGE BALLS.—Take a large, firm cabbage, boil whole in salt and water till tender enough to eat, but not to fall to pieces; then lay in cold water till ready for use, or until perfectly cold. Take the leaves from the stalk without breaking them, lay three or four together open on the table until you have a dozen piles. Fry an onion and chop fine with the remainder of the cabbage leaves; season lightly with salt and pepper, and mix in a pound of highly-seasoned sausage meat; make into balls and lay them on your cabbage leaves; roll the cabbage leaves around them, and tie firmly with a soft string; lay in a baking pan with half a pint of stock or gravy and bake for 20 minutes in a moderately hot oven.

BEEF A LA MODE.—Take a piece of round of beef, about six or eight pounds in weight; lard it with bacon dipped in salt, pepper, ground cloves and allspice; put the beef in a pot which can be covered tightly, with some bacon, two carrots, a piece of celery, three or four small onions, a few slices of lemon, two laurel leaves and dried champignon, to cover the meat with; half vinegar and water, or wine and vinegar; cover the pot closely and paste shut if you can and bake slowly four or five hours. Before serving, skim some fat off and take one tablespoonful of flour and one teaspoonful of sugar; fry this very dark brown, add to the meat, and boil up again; then take meat out, strain the sauce, and serve with potatoes and parsnip salad.

BREAKFAST.—Get three or four pounds of rump steak, cut about an inch thick; put an ounce of butter in a frying-pan large enough to hold your steak, and let the butter melt without browning; wash the steak quickly in cold water and put it in the frying-pan, covering closely. As soon as it is thoroughly heated, season with a teaspoonful of salt and a saltspoonful of white pepper; then push the pan back on the stove where it will simmer—not boil—keeping it covered all the time and a weight on the cover. It will be found to be cooked and perfectly tender in an hour and a half. Put on a hot dish, and add half a teacup of tomato or two tablespoonfuls of walnut catsup to the gravy in the pan, and pour it over the steak.

PLAIN CHICKEN FRICASSEE.—Cut up the chickens, and wash well in salt water; put them in a pot with enough cold water to cover them; add (for two chickens) half a pound of salt pork, cut in thin strips; cover, and let heat very slowly; then stew until the fowls are tender. Cook slowly—if they cook fast they toughen and shrink. When almost done add, if desired, a chopped onion or two, some parsley and pepper; cover closely again, and when it has heated to boiling, stir in slowly a teacupful of milk, containing two beaten eggs and two teaspoonfuls of flour; boil up again and add a tablespoonful of good butter. Arrange the chicken nicely in a deep dish, pour the gravy over and serve hot.

PRIZE PLUM-PUDDING.—One pound raisins, one pound currants, one pound suet, chopped fine; three-quarters pound stale bread-crumbs, one-quarter pound flour, one-quarter pound brown sugar, rind of one lemon, chopped fine; one-half nutmeg grated, five eggs, one-half pound mixed candied peel, one-half pint brandy. Well mix all ingredients; beat the eggs and mix the brandy, then pour over the other things and thoroughly mix; to be boiled in a basin or mold for six hours at the time of making, and six hours more when wanted for use. (This receipt is said to have taken a prize in London, as being the best in 500 receipts.)

TAPIOCA CREAM.—Put two tablespoonfuls of tapioca to soak in cold water; set it on the stove, and, when thoroughly dissolved, pour in a quart of milk. When this begins to boil stir in the yelks of two eggs well beaten, with a cup of sugar. When this boils stir in the whites, beaten to a stiff froth, and take it immediately from the fire. Flavor to taste.

SPANISH CREAM.—One quart milk, four eggs, half an ounce of gelatine. Pour one pint of milk on the gelatine; when sufficiently soaked add the other pint of milk, and place it over the fire in a *bain-marie*. Beat the yelks of the eggs with three tablespoonfuls of sugar, and stir into the milk just before it boils; when it comes to a boil, take it off; stir into it the whites of the eggs, beaten to a stiff froth with three tablespoonfuls of sugar. Flavor with vanilla; pour into molds. Use the next day. It may be eaten plain, or served with preserves around it.

EAST INDIA MILLET—ANOTHER LETTER FROM MR. SANDERS.

EDS. RECORD-UNION: The article from my pen published in the RECORD-UNION some months ago, in which I endeavored to show the desirability of small farms, particularly here on the rich lands of the valley in Fresno county, seemed to possess one item that has gone, since that time, to the uttermost parts of the earth, and to have been very extensively read, and, generally, to have resulted in a demand for further information on the same subject. Everybody knows that the Chinese, East Indiamen, and other people who follow agriculture in the densely populated regions of the earth like China and India, are far better farmers than we are. The necessity for such superiority is found chiefly in the imperative demand for a greater yield to supply food to the great excess of population. Those regions have a climate like our own, a wet and dry season. It will thus be at once apparent to the thinking mind that we can make valuable importations of seeds from those countries.

Through the kindness of a friend then in Birma I obtained some seed of this millet in 1877, a part costing $8 per pound. I have tried it, as to growth, on both dry and irrigated ground. It will yield one heavy crop if it has only sufficient moisture in the spring to cause the seeds to grow. By irrigation it will outyield any other crop. I planted a drill of it beside a ditch in rich ground; it soon spread a foot in width, and yielded during the 296 days of its growth, over 100 pounds of green tender leaves and stalks to each square foot of ground, or at the enormous rate of over 2,000 tons of green fodder per acre. Many stalks are over a dozen feet high, and over 100 stalks from a single seed is quite common where it is planted in hills. Like all other plants long under cultivation, it now consists of many varieties; different varieties being suited to differences of soil, climate and length of season. None of them, however, will mature seed in a very cold climate or very short season. The most dwarf one that I have tried requires 178 days from time of planting to mature its first crop of seed. But, as new heads are constantly forming on suckers and limbs from the joints, it will ripen an additional crop of seed every succeeding ten days, until stopped by frost. Peter Henderson, an old and reliable market gardener of New York city, raised an acre of one variety of it for seed during the summer of 1877. He publishes an account of it on page 420 of the November number of the *American Agriculturist* of that year. He says:

"The millet was sown in drills eighteen inches apart—eight quarts to the acre—on the 15th of May. * * The first cutting was made July 1st, forty-five days after sowing; it was then seven feet high, covering the whole ground. The crop weighed green thirty tons per acre; when dried six and a half of hay per acre. After cutting a second growth started and was cut August 15th, forty-five days from the time of the first cutting. Its hight was nine feet; weight fifty-five tons per acre green; eight tons dried. The third crop started as rapidly as the second, but the cool September nights lessened its tropical luxuriance, so that this crop, which was cut on October 1st, only weighed ten tons green and one and a half tons dried. * * The aggregate weight was ninety-five tons of green fodder in 135 days from the time of sowing, and sixteen tons when dried to hay. * * There is little doubt that the pearl millet is equally as nutritious as corn fodder, which it resembles even more than it does any of the other millets. We found that all our horses and cattle ate it greedily, whether green or dry. * * Though our Northern seasons are too short to mature the seeds, our experiments show what abundant crops may be expected. It presents a new feature in our agriculture, and I feel sure that within ten years we shall wonder how we ever got on without it."

In *Moore's Rural New Yorker* of November 2d a full-page illustration is given of a bunch grown from a single seed. The editor says in describing it:

"Many of the stems were nearly of the same hight, the highest being ten feet one inch. Three feet from the ground the circumference was thirteen feet nine inches. * * There were fifty-two stalks, the weight of which was forty-two and one-half pounds."

In addition to the seed obtained from India referred to above, I obtained seed from every place of its growth in our own country. But none of it grew as well or gave as good satisfaction as that imported from dry, hot, interior Asia. That, and our longer season—more than twice as long as that in which Mr. Henderson raised his—will account probably for any superior success. Here, perfectly adapted as it is to our soil and climate, it will make a dense growth four feet in hight, heavy enough to be cut for hay every eighty days, or in one of our longest seasons it can be cut ten times during the year. Its new growth comes as naturally and quickly as does alfalfa after cutting. I have it growing with alfalfa in my pasture. My stock are never troubled with bloat. My neighbors are loosing valuable animals from that cause, while mine are exempt. I never attributed it to this additional forage until the other day, when a neighbor, who had just lost two valuable cows, came to me for seed, saying: "I have watched this matter for a couple of years, and I shall never let my stock eat alfalfa alone another year. Millet saves your stock, and I know it will save any stock that have ever so little in their pasture." The roots of millet are not reliably perennial. Some have lived over winter, but most of them have been killed by frost. I know very little of the range of soil in which it can be successfully grown. It has not yet been tested over a sufficient area of country. Our soil is of a light loam. It grows to perfection here. Wherever I may live in future I shall certainly try to raise it. I would like to see it tried in every variety of soil and climate in our State, and the results of its growth reported in the RECORD-UNION; and supplemental to this wish I will, in answer to dozens of inquiries, give my directions for its culture: Don't plow your ground for this crop till weeds have made a good growth and the ground has become warm in the early spring; then plow deep and harrow thoroughly; this will keep back the weeds, which is necessary, as it makes but a feeble growth for some time. Then while the ground is yet moist from harrowing, mark off in shallow furrows—using a corn marker—so as to make them but two or three inches deep; make them three feet apart; drop the seed at once, about a foot apart, in the drills, and cover with pulverized earth immediately, harrowing lengthwise of the drills or furrows. Two pounds of seed is sufficient for an acre. These directions are to grow it for seed or cut-up fodder. For pasture or hay sow twice as thick, in drills one foot apart; or sow thinly broadcast, using five to ten pounds of seed per acre. W. A. SANDERS.

Sanders, Fresno county, Cal.

A FAREWELL.

Thou goest, and I abide. Like some gray tower
Crumbling to ruin on desolate mountain hight,
Death-silent, save for screaming eagle's flight,
My patient day waits Time's corroding power.
While thou, with wings of flame, through Love's vast space,
Like some great planet, traversest all spheres,
I, all in vain, at lonely fount of tears,
Must strive to quench my soul's thirst for thy face.
But, 'mid thy varied splendors sometimes pause,
And stay sometimes thy sweep of radiant wing,
And bid thy voice old songs to memory sing,
For dirges on my broken life's lost cause,
Which thou hast sung, while I stood by thy side,
In those long-buried hours before Love died.
—[A. H. Louis, in Harper's.

STRANGE STORIES ABOUT ANIMALS.

A case of suicide in the dog is given by Morris, as an illustration of man's pitilessness to his worn-out animal dependents. The poor animal was old, infirm, paralyzed, useless, an outcast and a wanderer. Prior to its suicide by drowning it was characterized by sadness of look. It obviously pondered its course of action, exhibited for a time hesitancy, but at last came to a decision, and acted upon it with promptness and resolution. It preferred death to its experience in life, and refused to allow itself to be saved.

In another instance cited by the same author, the dog was old, diseased, distracted with pain. It, too, drowned itself with the utmost deliberation, first casting a last piteous, "longing, lingering, look" at its master, who had suspected it of being affected by, and probably had deserted it for the suspected, rabies.

An old collie (shepherd's dog) in Caithness, troubled with the infirmities of age, including deafness and the loss of teeth, in 1876 committed suicide—here again by drowning. "Evidently age was a burden to him. The day before the last scene in the drama was enacted he was observed to take a general survey of the locality he was about to quit forever—in a very shaky way. He then wended his way over the ground familiar to him in his hunting days to the sea-shore—a distance of about two miles—and without taking a longing, lingering look behind he plunged into the sea and expired. The act was witnessed by a number of persons on the shore."

A Newfoundland dog "of great age" had his feelings wounded by being scolded, beaten in pretense only by means of a pocket handkerchief, and having a door shut in his face when about to leave a room with his usual companions—a nurse and her group of children. Soon after he was found alive, but with his head altogether or partly submerged in a ditch. He was dragged out. But now he refused to eat or drink, and before long he was found in the same position in the same ditch, but this time dead. He had succeeded in this second determined attempt at drowning, having failed in securing his purpose with sufficient rapidity and directness by starvation.

A captive monkey that committed suicide by drowning, prior to the act was noticed to become morose. It refused all companionship, bit viciously, and had a marked fixity and vagueness—as if contemplative—of gaze (Forbes).

An American canvas-back duck used its bill to keep itself submerged till it was drowned, seizing water-weeds attached to or growing from the bottom of a pond or lake (Gilimore). "Certain fowls were determined upon suicide, and many jumped deliberately overboard" on the African lake Albert Nyanza (Baker). Captive birds sometimes poison themselves, apparently preferring death to confinement.

The American stag or deer commits suicide sometimes when seized or attacked by the glutton, by precipitating itself against trees (Pierquin and Watson).

Dr. Bidie has put upon record a very decided case of suicide in the common black scorpion of Southern India, as it occurs, for instance, in Madras. One was placed experimentally in a glazed entomological case and exposed to the sun's rays. "The light and heat seemed to irritate it very much. Taking a common botanical lens, I focussed the rays of the sun on its back. The moment this was done it began to run hurriedly about the case, hissing and spitting in a very fierce way. This experiment was repeated some four or five times with like results. But, on trying it once again, the scorpion turned up its tail and plunged the sting into its own back. In less than half a minute life was quite extinct." Another Indian officer confirmed Dr. Bidie's observation subsequently by asserting "that scorpions do commit suicide is a well-known fact. They turn back their tails and sting themselves to death;" for instance, "when surrounded by a circle of glowing embers," from which presumably they infer escape to be impossible and death by the torture of burning imminent. Pasley's experiments on scorpions also led to their death by suicide.

A certain trap-door spider of New Zealand combines murder of its young with voluntary sacrifice of its own life. "It is perfectly clear to me," says a most intelligent observer and describer of its habits, Robert Gillies, C. E., President of the Otago Institute, "that the spider deliberately sealed its nest and starved itself and its young to death. It evidently could not bear to leave its home, for it could have done so easily at any time with its young. The partial marring of its handiwork seemed to have so disheartened it that it sealed itself up in its own ruined house—a broken-hearted architect and builder."

In the town near which I reside there are at least two large dogs whose peculiarities are well known to many of the inhabitants, and especially to school children, which dogs are habitually sent by their masters (merchants of the town) to purchase bread for themselves. Each carries a penny in its mouth and each trots off, whenever a penny is given to it, to a certain baker's shop. There they rear themselves upon their hind legs, place their fore paws well on the counter, and thus firmly supporting themselves, they drop their penny on the counter, receiving a roll in return. This they carry back in their mouth in one case intact, the dog not eating its allowance till, the bread being broken up and offered, it understands it to be for its own use, and devours the fragments. * * * Much less common, but more suggestive incidents are the following: A certain terrier, now dead—"Captain"—long well-known in Rothesay, publicly begged money from suitable persons, showing great discrimination in the selection of persons to whom he made his appeal. When he had an excess of funds—more than he required to buy his modicum of bread at the baker's—he hid his money in the office of his master (who was and is still harbormaster), or sometimes about the quay, in which latter case his hoards were frequently found and appropriated by some needy and greedy quay porters or street arabs. He carried on this profitable business of begging on his own account till his teeth were quite worn down by the incessant friction of the coins he had caught up and carried.

A certain Newfoundland dog when offered a coin, if not at the moment hungry, would hide it under his mat, thus gradually accumulating a fund of coppers, from which he abstracted a penny or half-penny at a time, according to the state of his appetite. He knew perfectly well the difference between the coins and their relative value, and that he was entitled to receive two biscuits for the larger sum and only one for the half-penny. Sometimes he only wanted a single biscuit, and wished for the change out of his penny. Now and then he took a fancy for a French roll by way of a variety. If you gave him sixpence he would receive the change, and then allow you to take it out of his mouth, satisfied with his two biscuits. A retriever, "in consequence of being repeatedly tricked, never lets the penny out of his reach until the roll is laid down." Another dog "quite knew the right sized bun, and used to keep his paw on the penny until he got it." A third dog, having once been deceived by a baker, went ever afterward to a rival establishment on the other side of the street, always, however, calling first at the deceiver's shop to let him see the coin and custom he was losing.—[From Dr. Lindsay's "Mind in Lower Animals."