## WILLAMETTE FARMER.

## GOOD HEALTH.

EXPANDING THE LUNGS.—Step out into the purest air you can find; stand perfectly erect, with the head well up and the shoulders back, and then fixing the lips as if you were going to whistle, draw the air, not through the nos-trins, but through the lips, into the lungs. When the chest is about half full, gradually raise the arms, keeping them extended, with the palms of the hands down, as you suck in the air, so as to bring, them over the head just as the lungs are quite full. Then drop the thumbs inward, and after gently forcing the arms back-ward and the chest open, reverse the proinward, and after gently forcing the arms back-ward and the chest open, reverse the pro-cess by which you draw your breath till the lungs are entirely empty. This process should be repeated immediately after bathing, and, alro] several times through the day. It is im-possible to describe to one who never tried it, the glorious sense of vigor which follows this exercise. It is the best expectorant in the world. We know a conlimma the measure of exercise. It is the best expectorant in the world. We know a gentleman, the measure of whose obest had been increased by this means some three or four inches during as many months.—Home Journal.

CURE FOR DIPHTHERIA.—The ravages of diph-theria in Au-tralia have been so extensive within the last few years, that the Government offered the last few years, that the Government offered a large reward for any certain method of cure; and among other responses to this was one by Mr. Greathead, who at first kept his method a secret, but afterwards communicated it freely to the public. It is simply the use of sulphuric acid, of which four drops are diluted in three-fourths of a tumbler of water, to be adminis-tered to a grown every a water, to be administered to a grown person, and a smaller dose to children, at intervals not specified. The result is said to be a coagulation of the diphtheritic membrane and its ready removal by coughing. It is asserted that where the case is thus treated, and has not advanced to a nearly fatal termina-tion, the patient recovered in almost every in-

ADMINISTERING MEDICINE. - When a tea-spoonful of any medicine is prescribed by a physician, it should be borne in mind that the quantity meant is equal in volume to 45 drops of pure water at 60 degrees Fab. It is a good plan to measure off this amount in water in a small wive-glass, and mark on the latter the exect hight of the fluid. This will give an ac-curate and convenient standard for future use. Teaspoons vary so much in size that there is a very wide margin of difference in their containthe second secon

KEEPING THE HANDS SMOOTH .- A writer in the American Grocer says that glycerine is not used in the right way. She asserts that to pre-serve the smoothness and softness of the hands, keep a small bottle of glycerine near the place where you habitually wash them, and whenever you have finished washing, and before wiping them, put one or two drops of glycerine on the wet paim and rub the hands thoroughly with it as if it were soap, then dry lightly with a towel. Household work and bad weather will not prevent your skin from being smooth and soft, if this plan of using glycerine is followed.

BIRDS CARRYING CONTAGION .- The Elgin, England, Courant records the fact of a pigeon having been lately shot near the city which has been declared by veterinary surgeons and competent medical authorities to have been competent medical autorities to have been evidently affected by foot and-mouth disease at the time of its death. The body of the un-fortunate bird has, it is stated, been sent to the Veterinary department of the Privy Council office for examination, in the hope some new light may thereby be gained relating to the spread of this disease among cattle.

TROCHES .- Every one can make his own troches by following this recipe, given in the Household: One ounce pulverized cubebs, one ounce pulverized licorice, one ounce pulver-ized gum arabic, one-half pound pulverized sugar; just water enough to moisten; warm slightly, stirring constantly; roll thin, cut out with a thimble, and dry.

Nearly all the known recipes for plating arti-cles with tin are attended with the inconvenience of not giving the proportions of the substances to be employed for this operation. If, as is commonly done, very concentrated solution: are employed, tinning is not produced. If they are too diluted, the tinuing is slight. Numerous experiments have proved that the Numerous experiments have proved that the following formula produces excellent results: Dissolve 10 grammes (about 6½ dwts.) of tartaric acid in a liter (about 1½ pint) of very soft distilled water; boil this solution, plunge in it the articles to be tinned, and add 10 grammes (about 6½ dwts.) of fine granulated zino. This granulated zino may be easily prepared by shaking fused zino in a box coated with chalk. Then care must be taken to turn the articles to be tinned several times, and re-place the water which evaporates. At the place the water which evaporates. At the expiration of a short time the tinning com-At the mences, and the articles in the bath must be continually turned over till the required degree of tinning has been obtained. — Le Technologiste.

SUPERIORITY OF WOOD SCREWS OVER NAILS -Most mechanics who work in wood do not appear to understand the eminent superiority of wood screws over brads and nails. In many laces one screw is worth three or four nails. When one is securing cleats to batten doors or cleats to a wagon-box, nails are very unsuitable when compared with the efficiency of gimletpointed screws. Screws will hold two pieces of wood more rigidly than nails; and if the tim-ber should shrink a triffe the screws can be turned up tight; whereas it is difficult, in most instances, to tighten up loose work with nails in all places where there is an unusual strain on the parts to be held together.

Cow HAIR AS A SUBSTITUTE FOR WOOL.— There is now being menufactured in England a class of goods known variously as veloms, Ul-ster coatings, chinchillas, etc., alleged to be made of hair and vegetable fiber, without the admixture of wool in any shape. These goods are finding their way into the United States, and the custom house authorities are not a lit-

and the custom house authorities are not a little puzzled as to where to place them, when scheduling them for duty. Testimony of ex-perts was called in; but it was only another case in which "doctors disagreed." The so-lution of the problem has been made the duty of the National Academy of Sciences.

THE HORSE.

#### To Train a Colt.

A writer in the New York Spirit gives the following record of successful practices in colt

rearing and training: Well, we have bred our mare. In due time the foal presents itself, and pleases us. The mare is turned to pasture; proving a good milker, the foal has summered well. We take him up in the fall, wean and halter-break him. His feet now, upon examination, will probably be found very long at the toe, throwing him back upon his pastern; have the surplus foot taken away, giving him a level bearing - a very important matter; attend to it. If, upon wean-ing, he should become poor, yei feeds well, you may calculate he has worms; if so, Prof. Goings' remedy will remove them: "Give the feal every day for more them: "Give the

THE skins of fruit, especially grapes, are often swallowed with the vague notion that they promote digestion, or the idea that they pre-vent any bad effects from eating said fruit. No error can be more fatally absurd. Cases have occurred where such practices have been the cause of death, ard that of the most every other night an injection of half a pint off lin-meed oil and half an ounce of turpentine." They pass the stomach without any charge, although they cause excessive irritation, and frequently inflammation of the bowels.

Break him to Harness; Drive him for a time double if you have a good steady horse to drive him with. If you are to be successful in breaking colts you must exerbe successful in breaking colts you must exer-cise the virtue of patience. The well-bred colt is usually "high-toned," and, as breaking is a critical time you must not be in a hurry, re-membering, at all times, that "Grievous words stirreth up anger, but mild words turneth away wrath," or words to that effect. Our colt be-ing broke single, as well as double, we will pro-ceed to downlow the speed which we carting ceed to develop the speed which we certainly have reason to believe he has inherited. After

bandling him quietly for some time, to gain his confidence, we push him some, and, satisfy-ing ourselves that he has plenty of speed, we

THE TINNING OF BRASS ON COPPER ARTICLES. Nearly all the known recipes for plating arti-cles with tin are attended with the incon-renience of not giving the proportions of the ubstances to be employed for this operation. If, as is commonly done, very concentrated is tongene lolling. This is easily overcome by suspending the driving bit, or attaching it to the check by means of a simple elastic band, if they are too diluted, the tinning is slight. intre-quarters of an incu (one near is better) wide, one and three-quarters or two inches long; fasten the band in the center of your check bit by needle and thread. By this means you get rid of the tongue lolling habit.

# STOCK BREEDERS.

### Meaning of "In Line" and "In and In."

A stock breeder writes to the Live Stock Record in explanation of two phrases which are common in stock parlance, but which are not always definitely understood: In and in breeding means coupling sire with his get-or full. or even half brother and sister, together. Breeding in line means keeping one and the same strain of blood predominating in the male and female which are coupled together, though in one or the other it may be decidedly in a minority, while in the other it is sufficiently predominating to give, when re-enforced by the minority, a controlling influence in fixing the type and style of the produce. And now, after making these explanations, I will make the assertion that there is no other way whereby Short Horns can be bred up to the highest type

a short Horns can be bred up to the highest type of perfection and excellence, or can be kept up to this type after they are bred up to it, except by judicious in and in breeding and by keeping in line. In fact, just here is the real science and skill of Short Horn breeding displayed; for the converse of this proposition is just as true o —there is no way whereby a herd can be more rapidly bred down than by injudicious in and in breeding. It is bad enough to use an inferior size the first time, but it is next to total destruction to use him upon his get, and thus not only magnify his faults, but render them so fixed in the produce that it will require-several crosses of judicious breeding to eradi-cate the fault, and many more to so overwhelm the bad blood thus inserted as to render it entirely incapable of doing harm in some after cross.

CLOSS. But this idea can be better illustrated by the But this idea can be better illustrated by the use of fractions, and I may add not only com-pound fractions. but the idea very scon runs into complex fractions. For example, we will represent the bull by 3.4, plus 1.8, plus 1.16, plus 1.16, equal 1; while the cow, more scat-tering bred, can be represented by 1.3, plus 1.3, plus 1.12, plus 1.12, plus 1.12, plus 1.22, pound 1. qual 1.

#### The Practical Effects.

Now, it is generally estimated that the dam and sire exert each an equal influence in the formation, type and character of the produce; but in practical results it is found that while the dam and sire together is the source from which the type and formation of the produce is derived, yet it is very soldon that each fur-nishes exactly half in the produce, but instead, they furnish in proportion to the predominating fractions of blood contained in the two. For example, say, in the above, one of the thirds in the blood of the cow is identical with the three-fourths in the blood of the bull, then in the union, these two, being identical, assume Now, it is generally estimated that the dam the union, these two, being identical, assume the union, these two, being identical, assume their proportionately overpowering influence in making up the form, skyle, etc., of the pro-duce; and if all these minor fractions in both dam and size are each allen to the other, or comparatively so, they are only the more over-whelmed and controlled by this majority. But suppose that the other third in the blood of the oow is identical with the sighth in the blood of the bull, then the union of this third and eighth, though still a minority, will be suffi-ciently potent to exert a perceptible modifying influence. influen

Thus we see at once where rests the science Thus we see at once where rests the science of Short Horn breeding; and we are forced to realize the fact that this science cannot be learned from books and papers, because it cannot be put into them, and this also explains what Mr. Bates meant when he said in his blunt English way that "Short horn breeders were born and not made," and again, "you can find 100 men to make Premiers where you find one fit to make a Short Horn breeder." (States-men can be made principally by education or men can be made principally by education or book learning.) We see, too, the great utility of bull intensely in bred, of a choice strain, and of high type; and we are now enabled to render an intelligent meaning for prepotency-a word newly coined, and yet undefined in the dictionary-made expressly to order for Short Horn parlance, as well as to account for the fabulous prices paid for Duke bulls, while other scattering or cross-bred bulls of extra fine form

## SHEEP AND WOOL.

#### Mr. Peters' Experience.

According to the report of Hon. Thomas P. Jones, the Georgia commissioner of agricul-onlture, Mr. Richard Peters is one of the best informed and experienced sheep husbandmen of the state. Mr. Peters has tested the Spanof the state. Mr. Peters has tested the Span-ish Merino, French Merino, Southdown, Ox-fordshiredown, Leicester, Ashatic Broadtail or Tunisian, Improved Kentucky, Cotswold and native sheep. Of these, the Spanish Merino and natives proved most profitable, the other pure breeds proving unhealthy with him. He has tested croases between the Southdown and native, Coiswold and native, and Spanish Merino and native. The croases between the Spanish Merino and native, and the Cotswold and native, have proved profitable. Of these two crosses he. in common with nearly every and native, have proved profitable. Of these two crosses he, in common with nearly every other Georgis correspondent, gives the deci-ded preference to the cross of the Spanish Merino and native. Mr. Peters' experience and experiments extending through 27 years, are of great value; and while they must have been expensive to him, they will save others the expense and time of ascertaining, by exper-iment, what he has already done for them. For general purposes, for wool and mutton, he recommends, most decidedly, the cross from native ewes and Spanish Merino rams, as the product of this cross showed marked improve-ment, having constitution, fattening properties, thriftness, and a compact close fleece. Where the pasturage is good and more size of carcass is desired, a Cotswold ram may then be used to advantage, with one-half or three-fourths-blood advantage, with one-half or three-fourths-blood Merino ewes. A first cross between the Cots-wold and native is seldom successful. The pure bred Cotswolds begin to decline after the first season, and their progeny seldom do well unless the pasturage is extra good and in small focks, with constant care and attention. While he raises only 70 lambs to the hundred ewes of the more Maxime he mission between the confirst season, and their progeny seldom do well unless the pasturage is extra good and in small flocks, with constant care and attention. While he raises only 70 lambs to the hundred ewes of the pure Merinos, he raises a lamb for every ewe of the cross-bred native and Merinos. During mild winters in Gordon county, his sheep require feeding only 30 days; in cold, wet winters, sheep must be fed twice that length of time.
The Eucalyptus and Other Australian Trees.
[From the Pacific Bural Press.]
EDITORS PRESS:—It was my good fortune some days ago to receive from our fellow towns man, Mr. Hugh Mackey, some interesting facts and information in regard to the Australian eucalyptus and other valuable trees and woods as they have been tested by long use and exparience in their native land.
Mr. Mackey is the brother of Hon. Angus Mackey, commissioner from Queensland to the

Mr. Mackey is the brother of Hon. Angus Mackey, commissioner from Queensland to the Centennial Exhibition, and the facts and memorands referred to were received from him during his visit to his brother here, before leaving for the Eastern States.

#### An Australian Table.

I had also the pleasure of examining, at the house of Mr. Mackey, a present from his brother of a circular table, the top of which was very tastefully and skillfully veneered and inlaid with many kinds of eucalyptus and other valuable woods of the colony. This beautiful piece of furniture from Queensland, composed of so many pretty specimens of eucslyptus and other valuable woods, gave us a clearer idea of the great value of these Australian productions than any mere description of them could possibly have done. Of the eucalyptus specimens

of which there were 16 pieces, arranged in the shape of a star in the center of the round table top, all were beautiful, exhibiting a great va-riety of rich and attractive colors, the grain of the woods being of such qualities as to receive the finest polish. No rosswood or mahogany could surpass these specimens in finish or richness of color.

#### Value of Eucalyptus Wood.

Knowing that there is a spirit of inquiry all over the State as to the best kind of trees to plant—adspted to our varied climate and soils, and the different purposes for which they may be wanted—I thought perhaps some facts and statements coming from the source referred to might be of some benefit to readers of the Parss, who might contemplate going forward in this interesting line of improvements. The creat success which has a cowned the introduce maple.

trees at \$5 a pirce, the price wood is now worth per cord in the tree, and we have the comfortable sum of \$22,000, as the product of 10 acres of land in 17 years. How this would compare with farming or fruit growing, I am not prepared to say. But when we take into account the small outiny required to start the plantation of trees, and the little work required in their cultivation for the first two or three years only, we cannot but conclude that in years only, we cannot but conclude that in comparison with other productions of the soil, this would compare most favorably. It should be borne in mind that whatever might be the pecuniary results of growing trees

might be the pecuniary results of growing trees for fuel or lumber, that if planted on land suit-able for the purpose, but little or no expense is necessary after they have been well started and established. All you have to do is just to let them alone, to stand and grow year after year, while you may, if you choose, be employed in some other profitable business. There are other considerations favoring this interesting question of tree planting, aside from the mere question of dollars and cents to be realized as speedily as this fast age demands, which should have weight with the patriot, the philanthropist, and the lover of the beautiful in nature. But these introductory remarks have already been extended beyond my first intention.

#### Some of the Timbers of Queensland.

Some of the timbers of queensiand. Iron bark (Eucalyptus siderophioia), grows all over the open country; diameter, 20 to 30 inches; bight, up to 80 feet; with a rough fur-rowed bark; the hard timber makes good sleepers and bridges. A beam of iron bark, 20 feet long, two inches wide and seven inches deep, with a weight of 3,301 pounds, yielded four inches, out did not crack or break. On removal of the weight, the beam was found to have a "set" of one inch, but was otherwise unininged.

nave a set of one intri, out storesa), diameter, Siringy bark (Eucalyptus fibrosa), diameter, 18 to 24 inches; hight, up to 60 feet; timber used for flooring and fencing, but it is inclined

Blood wood (Eucalyptus carymbosa), grows Blood wood (Eucalyptus carymbosa), grown up to 150 feet; diameter, up to 36 inches; wood very durable; has been found quite sound after submersion for years; used for fencing, anchor stocks, building, etc. Black butt (Eucalyptus pilularis), grows in the ridgy country; diameter, up to 40 inches; bight, up to 80 feet. A valuable timber for building. Turpentine tree (Eucalyptus Stuartina).—A magnificent tree, with large branches. Hight up to 150 feet; diameter up to 50 inches.

Timber very durable and strong; does not burn easily. Does not split well, but excellent when sawn

 Bawn.
 Red mahogany (Eucalyptus resinfera).— Grows up to 80 feet; diameter up to 30 inches.
 Takes fine polish. Used for cabinet work. Is very strong and durable.
 Beech (Gmelina Leichhartii).—Grows in rich soil, Diameter up to 40 inches; hight up to 100 feet. Wood easily wrought; does not con-tract or expand with heat or wet; very beautiful and durable.
 Bed cedar (Cedrela Toona).—Grows on rich Red ceder (Cedrela Toona).-Grows on rich

soil only, with dense growth of vegetation. Diameter up to 76 inches; hight up to 150 feet. White cedar (*Pentaceras Australis*).—Diam-eter 12 to 20 inches; hight up to 60 feet. The

wood is close-grained, tough and firm. Pencil cedar (*Dysoxylon Muelleri*).-Grows in land similar to red cedar. Diameter up to 40 inches; found in scrubs on the various rivers.

Cypress pine (Cullitris Columnaris).—Diam-eter 20 to 30 inches; hight up to 60 feet. Found on sandy soil. Wood valuable for durability, grain, fragrance, susceptibility of high polish and resistance to attack from ants.

3

## USEFUL INFORMATION.

### Mending Tin-Ware.

Faith Rochester, in the Agriculturist, des-cribes a method of soldering which we have long used, and can recommend it to all our read-ers. It is essentially as follows:—Get an ounce of muriatic acid, put it into an old tea-cup or bowl, and throw in a few small pieces of zinc, such as you can pick up at any tinner's. After it has ceased to effervesce, turn into a bottle and use a small stick to apply the liquid to the tin. Scrape the tin clean and bright around the place to be mended, rub some of the liquid on with the stick, lay on a piece of solder, and hold it over a lighted candle till it melts, and the job is done. We use a small soldering iron, and much pre-

fer it to the candle plan. A soldering iron can had for 25 cents that will answer every pur-pose; 10 cents' worth of solder will last a year in an ordinary family, and the muriatic acid pose; 10 cents' worth of solder will last a year in an ordinary family, and the muriatic acid will not cost any more. What a tinner or traveling tinker would charge for a single job of mending will buy a complete outfit, and then you are done with the annoyance of leaking vessels, or being compelled to work without them, at a great disadvantage. With farmers who live some distance from town, the solder-ing outfit is one of the greatest conveniences— with us it is indispensable. We keep the iron, solder and fluid (the latter well corked except when in use) in a box by themselves, on a shelf when in use) in a box by themselves, on a shelf out of the reach of children. The muriatic acid is a very powerful corrosive agent, and must be bandled with extreme care. Children must not be permitted to get hold of it. Several years ago we bought a bottle of soldering fluid of a man who was traveling around selling it—

### Begins to Hitch;

There must be some cause for this. Thinking he has too much work, we let up for a time, but as soon as we begin to send him along he begins to hitch again, and swing from one side to the other with his hind quarters. Upon ex-moination you find that he has been hitting his hind foot about the coronet with the too of his hind foot about the coronet with the toe of his front foot in passing by; or, if an open gaited long s'rider, you may find, by putting on shin boots behind, that he is hitting his shins or pasterns in passing by boot. For this the prin-cipal thing in handling a colt is to watch him closely, and when you see him changing his suit avertain the cause at comes and remove it closely, and when you see him changing his gait ascertain the cause at once, and remove it, if possible. It is very hard to square up a con-firmed hitcher; sometimes toe weights on the front feet will do it, the weights regulating the action the same as the regulator to the steam engine; if that fails, then weight behind— weight first the foot he steps short on; if not satisfactory, try the other, then both. If your celt is a little hot headed, and you urge him too much, you may get him to much, you may get him to

much, you may get him to Single-Footing. The only way out of this is by very heavy shoeing forward, or the toe weight, which will certainly square his gait. The little mare. Nashville Girl, wears 22 ounce shoes. Why? Because she requires them to keep her steady in gait. I think 12 ounce shoes and 6 ounce weights would be preferable. At the races in Cleveland, in 1874, before Charlie Green handled her, in scoring in the race in the first and second heats, she would come to the score single-footing and unsteady; but, by the skill-ful handling and shoeing of Charlie Green, you see no more of that. Should your colt get into the bad habit of Carrying the Head to One Side,

### Carrying the Head to One Side.

must not be permitted to get hold of it. Several years ago we bought a bottle of soldering fluid of a man who was traveling around selling it-at 50 cents per bottle. Not long afterwark we got hold of the above recipe for making procisely the same thing—at a cost of 10 cents instead of 50. Wasa AND Trans or Battimon Tranvs.—It is estimated that every time a train of cars of the average length stops, it costs in wear and tear of material and loss of power, fully 75 cents. This is what makes a conducter always look the beerful when he hauls up at a flag station, in the middle of a snow storm, to take on a string of onions and a man with a dead-head pass. Ax invention has just been patented by which the gas from coal stoves may be utilized for highing the various apartments of a house. Or annoy you by shying, I advise, by all means to try the Baldwin bit. Horses often carry

and style sell at prices comparatively insignificant.

### To Calculate Periods of Gestation.

The following table, compiled by the Agricultural Journal, is worthy of preservation for ready reference. It shows the time at which the average gestation of domestic animals expires, dating from the first day of each month in the year:

Cow, 283 days.

Time. Ja.uary. February. March.... November..... December..... January..... February April. May March.... April. May. June. July August..... September... October.... November... December. July. August. September. Time. January ... February arch .... l July... August. Reptember. October. I Occober. Jecember. Jecember. Jenuary. Jebruary. Hebruary. March. August. April.... Time. January... February March.... Bow, 113 days April..... May..... June..... July.... August Beptember October... November December July.... 1 January. 1 February. 1 March....

As INTERBUTING EXPERIMENT.—A very pretty lecture experiment arranged to show the low temperature at which a flame may exist, may be pronounced in the following manner: Boil in a long necked flask, in which a tube has been fitted with a tight cork, a small bit of phospho-rus with five times its weight of lime. As the phosphoretted hydrogen issues from the tube, it burns with a pale green flame, at so low a temperature that a common friction match may be held therein for a considerable time without taking fire. The experiment is somewhat dan-gerous, and should be made with great care, and with only a very small amount of phos-phorus.

tion of the eucalyptus into our State, inspires the belief that there may be many other valua-ble kinds of trees that might be introduced as

he kinds of trees that might be introduced as well. The adaptation to our climate and soil can only be fully tested by experience. Mr. Mackey was surprised at the splendid growth the encalyptus was making here—far surpassing in rapidity that of its native land, which may, however, be accounted for by the care with which it has been cultivated. In calling the attention of nurserymen and tree planters to this applied, the witter would

tree planters to this subject, the writer would acknowledge that he is not informed what has already been doue in this direction. Perhaps most or all of the trees reterred to in this artic may have already been introduced and tested in some localities. Still, I hope a description of them as they are found in their native forests may prove interesting reading to many of your patrons.

#### What This Generation Can Do.

In your editorial article of January 29th, on 'Eucalyptus Woods," you say:

"It may not be for this generation to profit largely from the material of the trees" growth except for firing, because it will be years before keels of ships can be laid with California grown sucalyptus as to-day n Australia.

This is doubtless true; and yet I think there This is doubtless true; and yet I think there are uses to which the eucalyptus can be put which may largely benefit the young men of this generation. Suppose a young man of 21 years starts out in the world with, say, only 10 acres of good land planted to eucalyptus trees. At 10 feet apart each way he could set 4,400 on this land. Now, suppose his trees should all do well and grow as rapidly as the one on Delmas avenue, referred to in my letter about the Alameda avenue, in the RUSAL PRESS of January 1st. This tree at the age of 17 one on Deimas avenue, referred to in my letter about the Alameda avenue, in the Rusal Pakas of January 1st. This tree at the age of 17 years (as I was informed by the man on the premises), measures six feet in circumference four feet from the ground, and was estimated to be 115 feet in hight. This tree would out, say two cords of wood, worth \$5 per cord in the tree, making \$10 for the tree. Or if 48 feet of it from the stump was sawn into inch boards, it would make, according to a lumberman's rule before me, 691 feet of square edged boards, worth, at 1% cents per foot, \$10.36 for lumber. And the balance of the tree would make half a cord of wood, worth \$2.50 in the tree, thus making \$12.86 for the tree as it stands. This amount per tree would give the young man 17 years hence, or at the age of 38 years, the nice little sum of \$66.584, as the product of 10 acres of land for that length of time. But suppose we drop this calculation based upon possibilities and adopt one based upon more reasonable probabilities, and average the

Bunya Bunya (Araucaria Bidwilli) pine.-Diameter up to 50 inches; hight up to 220 feet. This noble pine grows in mountain scrubs; it is protected by the government of Queensland is protected by the government of Queensland because the seeds of the cones are a favorite food for the natives. The wood is strong and good, easily worked, and shows beautiful veine when polished. Light yellow-wood (*Flindersia Oxleyana*),— Diameter up to 40 inches; hight up to 100 feet. Is a good timber and has dyeing properties. Dark yellow-wood (*Rhus rhodanlhemum*).— Diameter up to 24 inches; hight up to 70 feet. A soft, fine-grained, and beautifuly marked wood.

wood

Bilky oak (Grevillea robusta) .- Grows in Billy Oak (Grevita roousta).—Grows in damp, good soil; diameter 30 to 40 inches; hight up to 100 feet. The wood is used by coopers and cabinet makers. Box (Tristania confera).—Diameter up to 50 inches; hight up to 100 feet. Timber strong and durable in dry places. Moreton Bay chestnut (Castanospermum Aus-rale).—Grows in scrubs: diameter 24 to 36

ableton bay chestnut (Castanospermum Aus-rule).—Grows in scrubs; diameter 24 to 36 inches; hight up to 90 feet. The dark timber of this magnificent tree, with its green glossy waves, is like walcut. Broad-leaved cherry tree (Exocarpus lati-folius).—Grows in rich soil; diameter 6 to 9 inches; hight up to 25 feet. Cabinet makers mee this very hard and freerant timber.

inches; hight up to 25 feet. Cabinet makers use this very hard and fragrant timber. Coach wood (Ceratopelalum apetalum).— Diameter 24 to 36 inches; hight up to 90 feet. This soft, light, tough, close-grained and fra-grant wood is employed by joiners, cabinet makers and coach builders. G. W. M. Santa Clars, Cal., Mar. 11th, 1876.

AMERICAN STREL .--- An Englishman, now an ironmaster in Pennsylvania, says that steel is now being made about as cheep as iron; that every mill that is adapted to making steel has more orders than it can fill, and that such mills East Tennessee, we have a number of ore beds that are already being turned into metal and sold in advance to the manufacturers of steel. Soli in advance to the insumstatives of steel. Still we must say that we as yet know but lit-tle of what we have. We have hundeds of ore banks that never had a pick nor shovel in them, let alone the fact that they have never been tested."

The Danforth locomotive and machine com-pany, at Paterson, N. J., is about to build 10 heavy locomotives for the Central Pacific railroad.