Switzerland has just decided to make insurance against accident and sickness compulsory on all citizens.

Wheat and corn have done so well in Central Kansas that it is computed in the New York Sun that the money receipts from these sources will be greater by one-third in that part of the State this season than last.

A Parisian work on the morphine habit says it is most prevalent in Germany, France and the United States, and, strange to say, that the medical profession furnishes the largest number of morphinists—forty per cent.

As the English upper classes do not object to their boys being birched, it is only royal Princes and the sons of noblemen who receive corporal punishment in the great English schools. So at least says the headmaster of Harrow.

Miss Lell Segeur, Superintendent of the city schools of Decatur, Ill., refused to swear to the assessor's list, or to give him a list of her taxable property. For this she was arrested and fined $18. She believes that if she cannot vote she should not pay taxes.

Holland has extended the elective franchise so as to permit workingmen to vote. Though in most respects a progressive State, Holland has hesitated about this step because of a dread of the socialists, who are bred in Holland into a peculiarly bitter type which might almost better be termed anarchists.

Newspapers of the City of Mexico report that a stock company is being formed in that city with a capital of $60,000 for the purpose of elevating "the noble art" of bull fighting. The company will import both bulls and fighters, the sister Republic being evidently unable to supply the genuine simon-pure article.

The New York World estimates that Kansas, Nebraska and Oklahoma will sell this year not less than 95,000,000 bushels of wheat at more than half a dollar a bushel net price to the producer. The other wheat-growing States will reduce even these figures to insignificance by their results. There is more gold in a good agricultural soil than in any Klondike placer ever yet discovered. There is truth yet in Irving's story of the old Hudson River Dutchman whose digging for treasure under the inspiration of dreams gave him greater wealth in cabbages than he had dreamed of in the chests of gold.

A recent statistical estimate places the number of newspapers which are annually printed at the enormous figure of 12,000,000,000. A mathematician, apparently with considerable time at his disposal, in order to give a more comprehensive idea of this number, has calculated that a surface of 30,000 square kilometres could be covered with these papers. The paper alone weighs 781,240 tons. In case one machine was forced to print these millions at the rate of one a second three hundred and thirty-three years would be necessary. Placed one upon another the papers would reach to the height of eighty thousand metres. Assuming that a person devotes five minutes a day to reading his paper the time used by the entire population of the world in reading newspapers each year amounts to one hundred thousand years.

A contributor to the New York Evening Post finds himself able, in reviewing the manners of contemporary American men, to aver that the rising generation of boys is a great deal better bred than the lot that preceded them. For purposes of comparison he classifies Americans whose behavior has come under his personal observation into gentlemen of the old school, surviving examples of which were still extant in his youth, gentlemen of a school which began about 1875, and the youths of the present period. He relates a number of afflicting characteristics of the school of 1875, and praises its latter-day successors as being more civil, more deferential to their elders, and better balanced, as shown in their being much less apt to fall over one another in offering attentions to casual and unidentified Englishmen who may have straggled over to this country. In this new school of better Americans this observer sees "the influence of their mothers—those women we knew as girls, and who were so far ahead of their brothers and husbands in refinement and culture." To have seen these girls marry and bring up their sons so well has been, he says, a satisfaction and a compensation for many delusions.

PATIENCE.

A-wooing pretty Patience,
Went I, a love-sick swain,
And found her in the orchard,
Amidst the trees and grain.
And then I plead with ardent words,
And, when I thought her won,
I seized her—would have kissed her—Ah!
The conquest was not done.
For with a haughty, mocking eye,
Low courteseying, the maid did cry,
"Kind sir, have patience."

A-wooing cruel Patience,
Went I, a love-sick swain,
And, sore of heart and of conceit,
For love found only pain.
Then straight I turned me round about
And would have strode away,
But saw the maiden's lashes drop
As though to bid me stay;
And while I pondered if to go
There came a whisper—falt'ring—low,
"Kind sir,—have Patience."
—Richard Stillman Powell, in Puck.

A BICYCLE RACE WITH A TIGER.

By C. MUMFORD ROBINSON.

I WAS always very fond of bicycling, and from the time when I was a small boy, and labored for hours with a bone shaker, to the days when I became the proud possessor of one of the first "safeties" ever made, I reveled in the enchanting pastime, spending hours on the back of my steel steed, thus putting my physical powers a long way ahead of my mental. In fact, I hated the sight of a book, and was never happy unless "scorching" through the country on my bicycle.

My father was a doctor in an English village, and having a large family, he was thankful indeed when, at the age of nineteen, a commission was obtained for me by a wealthy friend in a regiment about to sail for India.

A grand new bicycle was my father's parting present, and great was my delight at finding that another young "sub" in my regiment was also a bicyclist.

In these days, when the bicycle has so many votaries, this may seem nothing strange; but to realize my surprise and pleasure, you must remember that a bicycle was then a comparative curiosity, and a bicyclist a person to be stared at and admired or otherwise. Our bicycles were, I believe, the first ever seen in India; and as we rode together in the town, some days after our arrival, one would have thought it was the triumphal entry of some Eastern potentate.

I could fill a book with the curious incidents and accidents which befell us going "up country." Our regiment was always on the move, and panics of one kind or another were very frequent on our bicycling excursions. One evening, after mess, Fred and I signed articles to ride a ten mile race.

There was a grand native road within a short distance of our camp, running away for ten miles as flat as a drawing-board. It lay through the open plain, and then a deserted tract was reached, becoming wilder as the road proceeded, and finally swallowing it up in an impenetrable jungle. It was on this road I intended to train. Fred had found a circular path round some native huts a short way from the station, measuring about six laps to the mile, and there he prepared himself for the coming struggle.

After a week of such training as would make a modern athlete's hair stand on end—meat almost raw, chopped very finely, etc.—we considered ourselves fit for the contest; and the adventure I am about to relate occurred the evening before the race day. I was just starting for a last ride over my favorite training course, when an officer stopped me and said:

"Have you heard of the tiger, Harvie?"

"No," I answered.

"The natives have just brought word that some tiger is marked down in a jungle about ten miles from here; so don't go too far, this evening."

"All right," I laughed; "I think a tiger would find it a difficult matter to catch me—my training would tell on him."

I had not seen any large wild beast as yet, and my notion of a tiger was a thin, sleepy looking animal, such as I had once seen in a traveling menagerie.

Away I rode, my comrade's caution forgotten before I had gone a mile.

I started at a good pace, but not racing, as I intended to do all I knew coming home. In an hour I reached my usual halting place, ten miles from the camp; but this being the last night of my training, I made up my mind to ride another couple of miles, and then do the whole distance back at a "scorching" pace.

I rode on, and in another ten minutes found myself in the jungle.

Now for the race home.

Dismounting, I oiled my machine, tightened up every screw, and then sat down on a bowlder to rest and enjoy the prospect. A beautiful scene it was, too!

Above me rose the grand mountains; their snowy tops blushing crimson in the setting sun; here a waterfall, like a thread of gold and silver, flashing down the mountain side and twining in and out among the masses of trees and rocks; there, a glimpse of fairyland through a jungle vista.

But now the shadows were deepening, the crimson on the mountain tops had disappeared, and the snow began to look gray and ghastly. A flying fox went rustling past me, and I hastily prepared to mount; for there is scarcely any twilight in India, and I knew it would soon be dark.

As I rose my eyes encountered some thing which made me start and nearly drop my bicycle.

There, not forty yards off, was a tiger. I knew the animal well enough; but how different he looked from the lean, half-starved little beast I had seen at home! He had just come into the open space from a dense jungle-brake, and sat there washing his face and purring in a contented sort of way, like a huge cat.

Was I frightened? Not an atom; I had my bicycle and a start of forty yards, so if I could not beat him it was a pity.

He had not seen me yet, and I stood for another minute admiring the handsome creature, and then quietly mounted—(the tiger was directly on my right, while the road stretched straight away in front of me). The noise I made roused him; he looked up, and then, after deliberately stretching himself, came leaping with long, graceful bounds over the rank grass and rocks which separated him from the road. He did not seem a bit angry, but evidently wished to get a nearer view of such an extraordinary object.

Forty yards, however, I thought was quite near enough for safety. The tiger was in the road behind me now; so I pulled myself together and began to quicken my pace.

Would he stop disgusted after the first hundred yards and give up the chase, or would he stick to it? I quite hoped he would follow me, and already pictured in my mind the graphic description I would write home of my bicycle race with a tiger.

Little did I think what a terrible race it was going to be. I looked behind me. By jove! he was "sticking to it." I could not judge the distance; but at any rate I was not farther from him than when we started. Now for a spurt. I rode the next half mile at a lively pace, but on again looking round, found I had not gained a yard.

The tiger was on my track, moving with a long, swinging trot, and going quite as quickly as I was.

For the first time I began to feel anxious, and thought uneasily of the ten long miles which separated me from safety.

However, it was no good thinking now; it was my muscle and "bike" against the tiger. I could only do my best and trust to Providence.

Now there was no doubt about the tiger's intentions; his blood was up and on he came, occasionally giving vent to a roar which made the ground tremble. Another mile had been traversed and the brute was slowly but surely closing up.

I dashed my pouch to the ground, hoping it would stop him for a few seconds; but he kept steadily on and I felt it was then grim earnest.

I calculated we must be about seven miles from camp now, and before I could ride another four miles my pursuer, I knew, must reach me. Oh, the agony of those minutes which seemed like long hours!

Another mile passed, then another. I could him behind me now, pad, pad, pad, quicker and quicker and quicker, louder and louder. I turned in my saddle for a moment and saw there were not twenty yards separating us! How enormous the brute looked, and how terrible! His huge tongue hung out, and the only sound he made was a continual hoarse growl of rage, while his eyes seemed literally to flash fire.

It was like some awful nightmare, and with a shudder I bent down over the handles and flew on.

On, on, on, I scorched. the slightest slip I knew would be fatal; a sudden jolt, a screw giving, a pedal breaking, and I should be hurled to instant death.

My strength would not stand much more; the prolonged strain had told upon me, and I felt all would soon be over. My breath came in thick sobs, a mist gathered before my eyes—I was stopping; my legs refused to move and a thousand fiends seemed to be flitting about me, holding me back! A weight like lead was on my chest; I was dying. Then a few moments which seemed a lifetime, and then—crash—with a roar like thunder the tiger was on me and I was crushed to the ground.

Then I heard shots fired, a babel of men's voices, and all was blank.

* * * * * *

After many days of unconsciousness and raging fever, reason gradually returned, and I learned the particulars of my deliverance.

A party of officers had started with a shikaree (native hunter) to a trap which had been prepared for the tiger. They were talking of our coming bicycle race, as they went along, and expecting every moment to meet me on my return journey. As they passed a clump of bushes I came in sight, whirling along in a cloud of dust, which hid my terrible pursuer.

They soon, however, saw my awful danger. The huge brute, mad with rage, hurled itself upon me just as we reached them.

My friends stood almost petrified with terror and did not dare to fire; but the shikaree sprang quickly to within a yard of the tiger, and putting his rifle almost to the animal's ear, fired twice and blew its brains out, just in time to save my life. I was drawn from under the palpitating body of my dead enemy, everyone present believing it was all up with me.

Making a litter of boughs they carried me into camp, where I lay for many weeks, lingering between life and death.

The tiger's skin now adorns my study, as my first and last prize won in a bicycle race.—The White Elephant.

How Tea is Adulterated.

Adulterated tea, which is being sold all over the European continent, is described in a German medical paper. This preparation has long been known in Russia, where it is sold under the name of "rogogeski." It is made in the following way: The manufacturers of this adulterate buy in the tea houses the residue from the teapots—leaves which have already been used—and mix these leaves, while still moist, with other leaves and very little genuine tea. The mixture is heated with an addition of extract of caramel and campeche wood, in order to improve the color and the taste. The weight is also increased by the addition of sand or soil, and just before being dried, the leaves are rolled between the hands. The adulteration is so difficult to recognize that a chemical test is necessary to prove it. If tea prepared in this way is dipped into a cold saturated solution of copper, the blue color of this solution will not be changed, not even if the adulterated tea is allowed to remain in it for three or four months. If the tea is fresh and has not previously been soaked, the solution will turn green within a short time.

When Elephants Have Toothache.

It is not easy to tell when an elephant has got a toothache, but it is best to keep out of his way when you do know it. A London surgeon, who had been for many years in India, says he would sooner risk a railway accident than meet an elephant with a toothache.

It appears that a toothache affects an elephant in a more severe manner than it does any other animal. Elephants have very sensitive nerves, and a touch of toothache often brings on madness.

Providing you are able to chain down an elephant and draw out the offending tooth, the brute is certain to be affectionate to you afterward. Here is an instance:

An elephant in Bengal, India, became affected with toothache, but the keepers managed to secure it while a dentist drew a decayed tooth—the cause of the trouble. After a time the elephant seemed to understand that the dentist was trying to do something for his pain, and he gave every evidence of appreciating the attention. When the operation was over he frisked round the dentist like a young lamb. —Answers.

Do Metals Become Tired?

Various instances are on record where metals, while not showing any appreciable wear, have literally fallen to pieces, and that without any assigned cause. On one occasion a steel rail, after twenty-two years' continuous service, on the Great Northern Railway, in England, actually disintegrated under the wheels of a passing train. So complete was the breaking up that scientists thought it worthy of investigation, during which it was determined that the metal had become exhausted and had broken down, just as an overstrained animal might be expected to do. This has led to further inquiry and scientists are satisfied that metals do become tired out. Fine cracks ofter appear in steel rails and it has been supposed that they are caused by the continuous concussion of railway wheels. This, however, seems to be contradicted by the examination of newly-made rails, in which similar fine lines occur. The idea that metals become weary, while not altogether a new one, is to an extent a plausible one, and under the careful scrutiny of scientific societies will probably be satisfactorily explained and settled.

World's Biggest Fountain.

The greatest fountain in the world was turned on recently at Indianapolis, Ind., and permitted to flow for an hour. It is one of the cascades now in the course of construction at the base of the Soldiers' Monument. The flow of water measures fully up to the contract, which calls for 7000 gallons a minute at each of the two cascades as a regular thing, with a capacity under high pressure, however, that is much greater. The combined capacity of the world-famous fountains at Versailles, hitherto the largest in the world, is 80,000 gallons an hour. They would make but feeble streams in comparison with the monument cascades, and yet the cost of running the French fountains is so great that the water is only turned on on gala days.

Turned the Cow Around.

When the good ship Queen was weighing anchor for Alaska from Seattle a few days ago a man rushed down to the purser and exclaimed excitedly: "Look here, I paid for a stateroom for myself and wife, and when I got there I found an old cow sticking her head through the window." "I am very sorry, sir," said the purser; "we are very crowded, but I will do the best I can for you. John (turning to a deck hand), go up on deck and turn that cow around!"

India Rubber Streets.

India rubber as a paving for streets was tried on a bridge in Hanover, Germany, a little more than a year ago, and proved so satisfactory that experiments are being made in Berlin and Hamburg with it from ordinary roadways. It is said to be perfectly noiseless, unaffected by heat or cold, and less slippery and more durable than asphalt.

PEANUTS INVALUABLE.

FEW PRODUCTS OF THE SOIL PUT TO MORE USES.

It Is Known by a Greater Variety of Names Than Any Other Edible That is So Universally Popular—Masquerades as Olive Oil—Three Varieties Grown Here.

According to all predictions the peanut crop of the United States is going to be short this year. But this does not mean that the supply will not be sufficient to satisfy Uncle Sam's small boys; for peanuts are raised in many countries besides our own, and the cost of importation is not great enough to increase the price materially.

This particular product of the earth is known in the United States by a greater variety of names, perhaps, than any other that is so universally popular. In various parts of the South it is the "ground nut," the "ground pea," the "goober" (sometimes spelled "gouber") and the "pindar." Over in England it is often called the "monkey nut," and this leads to the inference that in Africa and South Africa, where it grows wild, its edible quality first became known to man because the monkey fed on it. One of its names all over Europe is the "manilla nut," and this comes, no doubt, from the fact that it is extensively grown in the Philippine Islands. In France it is the "pistache de terre," from its similarity to the pistachio nut in taste and the uses to which it may be put.

The seeds are put in the ground in May, late enough to avoid the latest frosts. Until a few years ago peanuts were planted by hand, but now a machine is generally used which places them in rows three feet apart, distributes the phosphate which is almost always used as a fertilizer, drops the "beans," as the seeds are often called, in groups of three, covers them with two inches of soil and rolls the earth firmly—all in one operation. The cultivation of the peanut crop is very similar to the cultivation of potatoes, both the "cultivator," hauled by a horse or mule, and the hoe being used. Late in July a top dressing of land plaster is applied.

The vines of the peanut begin to bloom when they are eight or ten inches long, the blossoms being of a bright yellow color and very profuse. The flowers, however, are sterile; that is, they are not followed by seeds, as are the blossoms of most plants, even the potato, which, like the peanut, develops the edible product beneath the surface of the soil. Nature is extremely interesting in her method of providing for the propagation of the peanut. As the flower fades, a sharp-pointed stem grows out from the base of the plant, turns downward and buries itself in the ground. On the end of this stem are formed the pods, or "nuts," some little distance underground, and the plant needs no human attention whatever from the time of this pod formation till it is ready for harvesting.

The harvesting takes place late in October or early in November. Care is always exercised to get this work out of the way before frost comes, though if possible it is put off until just before the first visit of the icy-breathed visitor from the north. Formerly peanuts were taken out of the ground by hand, somewhat after the manner in which potatoes are harvested; but progressive peanut growers now use a plow with a "peanut point," which is run alongside each row so as to cut off the deep growing tap root. After this plow workmen follow with strong, broad forks, with which they lift the vines and roots from the ground and lay them on the ridge of soil that has been freshly turned by the plow. For a day the pods are allowed to dry in the sun; then the vines are stacked for curing, each stack being built about a pole that has been driven into the ground for that purpose. When thoroughly cured the nuts are removed from the roots, sometimes by hand and sometimes by machinery. The latter is the quicker, more economical method, but the nuts suffer from it to some extent, and some growers who wish to get the highest prices adhere to the old way of hand picking. The machines are worked by steam power, and both in appearance and principle are somewhat similar to the machines used in threshing wheat.

Besides the machine for picking the nuts from the vines, still another has been introduced. It is called "the blower," and its function is to grade the nuts and free them from whatever impurities have been left by the previous process. In this machine the nuts pass through a very strong artificial blast, from the force of which the heaviest are first released, to fall into the proper receptacle for the first grade, and so on. By this means about four grades of nuts are secured; those of the last grade—the very light ones—being practically worthless, especially as they are mixed with bits of roots, broken shells, etc.

Most readers, probably, think peanuts are raised solely that they may be eaten by boys, but this is a mistaken notion. Few products of the soil are put to a greater variety of uses. The vines form a decidedly valuable food for cattle. From the kernels an especially fine oil is made, which none but an expert can tell from the best olive oil. This oil is used in great quantities in the making of some of the finest grades of toilet soap. The kernels themselves are used in some parts of the world in the adulteration of coffee, and still more extensively in the manufacture of cocoa and chocolate. Ground into flour, peanuts form an admirable material for certain sorts of cakes and biscuits, and the negroes of the Southern States make from it an exceedingly palatable porridge, besides using it as a basis for a much appreciated beverage. The use of peanuts in candy-making is well known.

The annual product in the United States varies from 2,000,000 to 5,000,000 bushels, and practically all of this immense quantity is used here.

Three varieties are grown in the United States; the white, the red and the Spanish. The white peanut has two kernels only in each pod, and this is also true of the Spanish nut, which is considerably smaller, however, than the white variety and has a much milder flavor. The third variety, the red peanuts, often has as many as three or four kernels in each shell and is larger than either of the other varieties.

WISE WORDS.

To be angry, is to revenge the fault of others upon ourselves.—Pope.

He is the best accountant who can cast up correctly the sum of his own errors.—Nevins.

Every base occupation makes one sharp in its practice, and dull in every other.—Sir P. Sidney.

He who receives a good turn should never forget it; he who does one, should never remember it.—Charron.

Any one may do a casual act of good nature, but a continuation of them shows it is a part of the temperament.—Sterne.

Affectation in any part of our carriage is lighting up a candle to our defects, and never fails to make us taken notice of, either as wanting sense or sincerity.—Locke.

It is hard to personate and act a part long; for where truth is not at the bottom, nature will always be endeavoring to return, and will peep out and betray herself one time or other. —Tillotson.

It may be remarked, for the comfort of honest poverty, that avarice reigns most in those who have but few good qualities to recommend them. This is a weed that will grow only in a barren soil.—Hughes.

Aim at perfection in everything, though in most things it is unattainable; however, they who aim at it, and persevere, will come much nearer to it than those whose laziness and despondency make them give it up as unattainable.—Chesterfield.

The shortest and surest way to live with honor in the world, is to be in reality what we would appear to be; and if we observe, we shall find, that all human virtues increase and strengthen themselves by the practice and experience of them.—Socrates.

Birds and Reptiles Related.

Fossil remains have been found of birds with teeth and long bony tails, and also of reptiles with wings; great monsters they must have been, veritable flying dragons.

In 1861, in the lithographic slates of Solenhofen, Bavaria, a fossil feather was found which was the subject of considerable discussion among naturalists. Again, in 1862, a curious skeleton was disinterred from the same place, in which most of the bones exhibited the marks of a true bird, but the skeleton had a most remarkable tail, containing twenty distinct bones. From each of these bones proceeded a pair of well-developed feathers, similar to the single feather which had been previously found. Here was an animal which could be called a bird-like reptile or a lizardlike bird, with equal propriety. Its twenty caudal segments or vertebræ were a bar to its entrance into every existing family of birds, while it was equally out of place among reptiles. On account of its feathers this curious link in the chain between reptiles and birds was called archæopteryx. It was about as large as a dove.

The discovery of this remarkable fossil, possessing characteristics so decidedly both reptilian and avian, has thrown much light on the subject of gradual development of higher from lower forms.—Vick's Magazine.

As to Accident Damage "Adjusters."

The News' revelation yesterday of the scoundrelly practices of a number of individuals, calling themselves "adjusters," in respect to accident damage lawsuits, gave great pleasure to all the respectable lawyers in the city, while it carried dismay into the ranks of the shysters. These "adjusters" are only removed one degree from common blackmailers. They prey upon both parties in interest. Not only are corporations their victims, but also the foolish people who sign away their rights to them.

The Bar Association ought to take some steps to have this traffic legally prohibited. It is a disgrace to the legal profession. The lawyers of the Consolidated Traction Company ought also, on the trial of every damage suit, bring out the status of the "adjuster" and his confederate "lawyer," and hold them both up to public shame and for the guidance of the jury in assessing damages.—Jersey City (N. J.) News.

A Queer Cow.

Henry E. Niese, manager of the Sugar Trust's Jersey City factory, lives for the summer in Morristown, N. J. He is there rearing a cow which lately began developing queer tendencies. It drinks its own milk.

When the farm maid calls at the stable to milk the cow she finds that the milk has been drunk by the producer herself. The cow is growing fat on her own milk.

Some of the farmers of Morristown are anxious to experiment with this queer cow. Says one of them: "Why, what's the use of feeding that cow at all? She thrives so well on her own milk that she need not get any outside food at all. It will be a case of a cow growing fat on herself without any outside assistance."—Trenton (N. J.) American.

SCIENTIFIC AND INDUSTRIAL.

Inhabitants of Simu, of mixed blood, have faces that are spotted, piebald, and even white on one side and black on the other.

The electric tramway at Lausanne, Switzerland, runs up the steepest incline surmounted by any train depending on adhesion to the rails—11.3 per cent. in one place.

Black, blue and red ink used in German public schools has been found to contain microbes. When scientifically developed they prove fatal to mice within four days.

Tests of a parasitic fungus in Cape Colony promise an effective remedy against locust swarms, large numbers of the insects having died a few days after infection of a few specimens.

The advantages of acetylene for motor-carriages have not been overlooked. The acetylene motor now being built to the design of M. Raoul Pictet will have three cylinders, and will develop ten horsepower while occupying small space.

Some idea of the fine point to which platinum wire can be drawn will be got from the fact that threads have been drawn, two of which can be twisted together and inserted within the hollow of a human hair. These threads are so small that it needs a magnifying glass to see them.

The eminent Swiss specialist, Dr. Yersin, a pupil of Pasteur, declares his conviction that the plague which has prevailed in southern China since 1894, and in British India since 1896, is the genuine black death of the middle ages, and that it will in all probability reach Europe in a year or two.

Digestion proceeds more rapidly in the horse with active exercise than when eating is followed by a period of rest, according to the experiments of Dr. Tange, of Buda-Pesth. In the dog and in man, the opposite is true, which shows how unsafe it is to infer results in one animal from observations on another.

In experiments at some Prussian sugar works the use of electrolysis alone for purifying beet root juice is reported to have proven impracticable. When used in conjunction with lime, however, electrolysis completes the action, and precipitates almost three times the nitrogenous matters that are removed in the ordinary separation. The combined process is estimated to have saved about $7000 in treating 70,000,000 pounds of beet root.

A piece of glass may be made iridescent, according to a correspondent of London Engineering, by flooding with a dilute solution of silicate of soda, and allowing it to dry spontaneously in an upright position. Washing the plate in running water and again drying may bring out the colors more brilliantly, while blackening the back of the glass will render them gorgeous. The film adheres tenaciously, and can scarcely be removed except by etching.

Valuable Woods.

The economic uses of teak and bamboo have been of late very extensively commented on. Teak is said to be the most valuable wood for shipbuilders. Although porous, it is strong and lasting. It is very light and hard, but is easily worked. A peculiarity of this timber is that it contains an enormous amount of oil, and therefore is not injurious to iron when used in close contact. Decay comes on very slowly even where there is a great deal of dampness. Bamboo has a much wider range of usefulness, as it figures in almost all of the affairs of life from culinary purposes to the worship of the Chinese deity. Leaves, stalk, roots, tender shoots, indeed, every part of it, has its uses, and the Chinese are so accustomed to rely upon it for almost all of the emergencies of life that when they move to a new country they are at a loss for a substance to supply its place.

Astronomy and Longevity.

The astronomer Denning has published a paper showing that extremely long lives seem to fall to the share of those engaged in astronomical pursuits. In corroboration he mentions the eminent Fontenelle, who lived to be 100 years old. Caroline Herschel, the sister of the celebrated William Herschel, who herself discovered seven comets and performed a great deal of other valuable work, died at the age of ninety-eight. The older Cassini was ninety-seven when he died, Sir Edward Sabin was ninety-four, De Martin ninety-three, Mary Sommerville ninety-two, Giovanni Santini and Sharpe were ninety-one, and Milet, Airy (the director of the Greenwich Observatory), Humboldt, Robinson and Long all attained the age of ninety. Of those who were cut off at the youthful age of between eighty and ninety Mr. Denning mentioned no fewer than thirty-two.

To Save Your Boots.

A new wrinkle may be learned from an English soldier who was noted for keeping his boots in better condition and making them last longer than any of his brother officers. When asked what he did to them to prevent the leather from cracking and keeping it soft and smooth, his reply was, "Mutton bone." When an explanation was demanded he said: "It is nothing, I assure you. My man asks the cook for a knuckle bone, which he cleans and then bakes. After rubbing the leather with cream, he then frotles them as hard as he can with the bone. Usually my boots last me three years.

Feat of a Noble Whip.

The present Lord Lonsdale can claim to have performed the record driving feat of the age. On one occasion he drove a single horse, a four-in-hand and a pair ridden by postilions five miles each over a bad stretch of road in fifty-five minutes, including a change of vehicle.