IT IS YOU AND I.

A fool there was in the days of old,
And, faith! he wasn't the last on earth
Who bartered his place and his birthright sold

For a mess of pottage of dubious worth,
He wasn't the last of his kind, I say,
For over and aye, as the aeons run
And the gray earth whirls in its old, old way,
A sage is a rarity under the sun.

Who isn't barters his soul for naught?
Stand in your places, or low or high—
Who is it fails when to stand he thought?
Join in confession: It's you and I.
Who is it stumbles and falters and fails;
Bowing to error, yet loving the true?
Who when the wrong wears a coronet quails?
Tears for confession: It's I and you.

Whose are the lips that a prayer have framed,
Only in living to give it the nay?
Who is the one who is not ashamed,
Knowing the truth, with error to stray?
Who has forgotten his youth's fair dream,
The armies of evil to meet and defy?
Who has but learned to plan and to scheme?
Alas, for the wreckage! It's you and I.

A fool there was in the days of old,
And, faith! he wasn't the last on earth
Who bartered his place and his birthright sold

For a mess of pottage of dubious worth;
For still we are fools, and we barter still;
Yet who is it lifts his eyes on high,
And says: "I have fallen, yet rise I will!"
Now God be praised! It is you and I.

—Alfred J. Waterhouse.

A Ranger's Love Letter.

By John H. Raftery.

THE rangers were lounging about the corral. Breakfast was over, and the April sun was scattering the pale blue fog that uprose from the Rio Grande.

"Guess who I seen in Juares last night," said Tomkins, pleating his quirt.

"Panhandle Pete?" said Holliday, lounging up as he rolled a cigarette.

"Yep. How d'ye know?"

"How did he know?" roared Kelly. "What's he sparkin' Pete's gal fur? Eh, Holliday?" And the pockmarked Kelly laughed in the young ranger's face.

"Oho, that's the lay is it?" growled Tomkins, sneering. "Well, mebbe that accounts fur Pete bein' so leery o' comin' acrost the river. I never did think Panhandle Pete was a mind reader."

"What do you mean?" asked Holliday, his florid face tawny with anger. "If yo mean that I've told the woman anything, you lie!"

"Never mind, purty.", snarled Tomkins. "I ain't a-goin' to fight ye till I ketch this Panhandle bully. I'm after the reward. 'F ye kin lay low till I git it, ye can git all the scrappin' ye want."

Just then Peterson galloped round the corner of the corral with the mail from El Paso, and the rangers crowded around for letters. Captain Crews, a low-voiced, sun-browned man with black, curly hair, came out of his tent and took his letters.

"Tomkins!" roared the mail carrier, tossing a newspaper at the bowlegged ranger.

"Kelly!" and the surly giant reached out a big paw for his letter.

"And a love letter fur Holliday!"

The young ranger bit his lip as the crowd roared in ridicule, but he took the letter in silence, and going to his tent read:

.....

: :
: SWEETHEART:—I found :
: the flowers on my table after :
: supper. I know they came :
: from you. Meet me at the :
: middle post of the bridge at :
: 9 o'clock to-night. I have :
: something to tell you. Your :
: own FLORENCE. :
: :

.....

"Listen here, boys!" Captain Crews was calling to his men, "a letter from the Governor. The reward for the Pete Dimitri is increased—five hundred now. Can't some of you scheme up a way to get him across the river? I've sent him half a dozen baits, but he won't come."

"I sent him a letter from his gal," said Kelly, "but——"

"You don't expect him to bite at that kind of a game, do you?"

"It might of worked," said Tomkins, lowering his voice, "but every time we set a trap that dad-gasted woman puts him next."

"How in the devil does she know?" asked Crews, looking from one to the other.

"You might ask Holliday," sneered Tomkins. "I seen him in the Plaza with her Tuesday night, and I bet six bits he's a-readin' a letter frum her right now. I don't like that dude nohow, Cap. He ain't never done nothin' 'cept ride round an' look purty. He——"

"He can outshoot you, Tom."

"He ain't never shot nothin' 'r nobody, is he?"

"He's a peach with a lariat, isn't he?"

"Well, 'sposin' he is. He ain't roped nothin' 'cept this here gal o' Panhandle Pete's. I don't mind sayin' right out that I think he's a tippin' off Pete fur to stand in with th' gal."

"Ah, get out, Tomkins!" said the Captain, trying to smile as the men shuffled out of his tent, but he looked uncomfortable, and he saw that his men agreed in their estimate of the new ranger.

Holliday met Tomkins half way between the corral and the camp and said: "Tomkins, do you know where Pete is living in Juarez?"

"Naw, I don't know whar he's livin'," snapped the suspicious fellow, striding after his saddle and bridle. "I seen him dealin' faro in Del Nodal's monte, an' I got him spotted so's he can't get no letters there 'thout me knowin' it. Hear that, Mr. Tenderfoot."

But Holliday only sneaked back to his tent and sat down at the soap box which served him as a table. With much effort and many loving touches of the pen he finished addressing his letter. Then he saddled his pony, and leading it before Captain Crews' tent, saluted and said:

"Captain, I'd like a leave of absence till midnight."

Crews eyed him furtively from the corners of his bright, gray eyes, saw the end of a letter peeping from the pocket of his blouse, coughed, hesitated and then drawled: "All right, Holliday. I won't ask you what you're up to, but I don't mind telling you that the boys are saying ugly things——"

"I know it, sir. I hope you don't believe everything you hear?"

"N-no-oo, but, Holliday! You'll be careful what you say and do, won't you? I've my heart set on getting this Pete Dimitri. There are seven warrants out for him, and I'd give a week of my life if this troop could land him."

"I'll not spoil our chances, sir. You can bet on that." And the big suspect stalked away with the light of a lover in his black eyes and the spring of young fervor in his tread.

But when he had ridden away, the Captain summoned Tomkins and said:

"Tommy, I don't like the idea of spotting one of my own men, but——"

"I'll watch him like a hawk, sir," anticipated the bowlegged bully.

"But not a word to anyone, Tom! And promise me?"

"Yes, Captain."

"If it turns out that Holliday is all right you'll stop this backmapping and make friends with him?"

"I'll go you better, sir. I'll beg his pardon."

"He has leave till midnight. So have you."

And Tomkins, grinning maliciously, got on his pony and trailed away toward the river. And all that day like a stealthy shadow Tomkins stalked his man.

At 8 o'clock from his hiding place in a doorway Tomkins saw the "dude" come out of Wah Lee's restaurant, mount his pony and lope leisurely away toward the west. A mile from town he turned toward the river, and riding in the shallow water so as to leave no trail, went pacing slowly down stream toward the low wooden bridge which spanned the shallow river between old Paso del Norte and the American town. Tomkins, riding out of sight and hearing, in a parallel with his quarry, saw Holliday stop like a blacker shadow in the shelter of the bridge, his pony's head almost on a level with the low floor of the central span. Tomkins crossed the approach and driving his pony down into the ooze of the eastern side dismounted and tied it among the willows. Then he crept into the yellow shallows till he was opposite Holliday., raised himself into the low timbers of the bridge, and peered up and down the viaduct in search of the woman, or was it Panhandle Pete he should see at this lonely rendezvous? Even as he watched he saw the outlaw skulking along the western sidewalk of the bridge. He loitered, scanned the American approach, turned his back upon the little mule car which passed, and then, with a light spring, sat upon the top rail of the fence-like guard and began to make a cigarette. He was lighting it when suddenly from the opposite side Tomkins heard the whistle of a lariat. A woman screamed, "Run, Pete, run!" and the bulky body of the outlaw fell backward into the water. The watcher dropped down into the sand, got out his revolver, mounted his pony and scrambled out of the black shadows toward the shore. As he reached the level he saw a horseman streaking eastward in a long cloud of dust that rose high into the moonlight, and as he gained the bridge approach Tomkins saw the scared woman standing under a street lamp looking wildly after the vanishing cloud.

Captain Revere was smoking in the moonlight before his tent when he heard the clatter of horses' hoofs coming loud on the rocks and dull on the sand. "Kelly's drunk again," he guessed, as he walked toward the corral. But there he found Holliday dismounting. The men came running, but the "dude" laughed in their faces and said:

"I've got him, fellows. There at the end of my rope."

Tomkins, all befuddled with his vain stalking, galloped up as they stooped over the bound outlaw. They carried the limp prisoner into a tent and searched him, and in his greasy pocket they found a letter which read:

.....

: :
: SWEETHEART:—I found :
: the flowers on my table after :
: supper. I know they came :
: from you. Meet me at the :
: middle post of the bridge at :
: 9 o'clock to-night. I have :
: something to tell you. Your :
: own FLORENCE. :
: :

.....

They looked up at Holliday.

"I didn't forge the letter," he said blushing. "She sent it to me all right. But I—er—just fixed up the envelope a little."—Chicago Record-Herald.

Spanish Hunchbacks.

Spain has more hunchbacks than any other country. In some of the villages of the Sierra Modena seven per cent. of the people are deformed in this way.

Scottish Eagles Increasing.

Golden eagles are increasing in the Scottish highlands through the efforts of land owners for their protection.

The Tracks of Wild Animals.

By Ernest Harold Baynes.

SNOWFALL is a blank page from the notebook of Nature, and upon it her children write the stories of their lives, each in his own way. When we begin to read and translate them the winter woods no longer present a cheerless appearance; they no longer seem a dreary waste of snow-covered ground and bare, gray trees. We find that they are peopled by a busy community, whose lives are as full of problems as our own.

Here, you see, the first note we come across has been written by a mink—a uniform trail, which might be imitated by dragging a narrow board through the snow. The legs of the mink are very short, so that his body sinks in the snow, often covering up the prints of his webbed feet, and the trail is simply a gutter in the snow, with deeper spots at intervals marking the points at which the feet have sunk. The trail of an otter through deep snow is similar, but very much larger, as a full-grown otter is sometimes nearly four feet in length. In moving through the snow an otter leaps forward, and slides for a considerable distance, plowing up the snow with his chest, then leaping again, and sliding, as before. The distinctness of the footprints depends upon the depth of the snow; when there is only a thin covering they are as plain as the tracks of a hare.

Here is quite a different trail, also leading to the water. It was made by a muskrat, and in one important particular differs from nearly all other trails—there is a sharp and almost continuous line connecting the tracks. That line was cut into the snow by the sharp-edged and almost hairless tail, which drags on the ground as the animal moves.—Woman's Home Companion.

American Women in Europe.

By Henry Labouchere.

THE American woman has unquestionably been a success in Europe. She is generally pretty. She is clever. She takes pains to please those whom she considers worth pleasing. She has that instinct for the class above which only they have who belong to the class below, and, to use Taine's expression, she always "stands with shouldered arms and feels herself on parade." Her affectations and the sins which she commits against the commandments of European good manners are overlooked because of her American origin, and the favor accorded to her by royal personages and the exalted position she sometimes acquires by marriage.

With those advantages is it to be wondered at that American women have succeeded socially in Europe? But are they also a success as wives? It is true that comparatively few American women have trailed their characters through the divorce court in England. Social success is what they aim at, and the exposure entailed by divorce court proceedings might endanger this success. They are tolerant and expect their husbands to be tolerant. Society is the end-all of the life of such an American woman and since she has obtained a foothold in England, society has degenerated from a polite pleasure into a profession.

Has the American woman come to stay? If the women of this country can maintain their higher and more womanly ideals and profit by the education and experience of modern surroundings, they may await a reaction with confidence, assured that their beauty, their home-making qualities and their disinclination to thrust themselves under the limelight will be appreciated when men of the Old World cease to go the new to procure money and when the American woman and her ways are no longer popular novelties in Europe. —London Truth.

A Steady Atmosphere.

It is a Prime Requisite For the Study of Planets' Surface Conditions.

From William H. Pickering's "Lookout Into Space," in the Century.

ASTRONOMICAL science is divided naturally into two parts, that pertaining to the stellar universe and that pertaining to our immediate family of planets. The latter are the only bodies in the heavens of which we are aware that at all resemble our earth, and they are all, comparatively speaking, our near neighbors, and have, therefore, a much more personal and popular interest than the stellar universe at large. The study of their relative motions was virtually completed during the last century, so that at the present time the astronomy of the planets is confined chiefly to a study of their dimensions and surface conditions.

For this study there is one paramount requisite, and that is a steady atmosphere. With a good atmosphere, important results may be obtained even with a small telescope of only five or six inches diameter; but without such an atmosphere the very largest telescope will be of no avail. This is not the case in other departments of astronomy; for many kinds of observations on the stellar universe the quality of the atmosphere is of little account, provided only that it is cloudless and transparent; but for planetary and lunar astronomy a steady atmosphere is the fundamental requisite. To understand what is meant by a steady atmosphere, we have only to look at some object across a hot stove, or along the line of a railroad track upon a summer day. There is a shimmer in the air, a wavering motion, with which we are all more or less familiar. This wavering is always present in our atmosphere, although we usually cannot see it; but when we magnify the image of a planet in a telescope one thousand times, we magnify the atmospheric tremors in the same proportion, and they are then not only conspicuous, but they interfere very seriously with our observations.

In some parts of the world the atmosphere is much more steady than in others, and it is evidently a matter of the highest importance for the astronomer interested in planetary research to find where these places are situated. To illustrate the importance of this matter, I may say that a year ago, situated in one of these favored spots, I saw night after night, with a five-inch and even with a four-inch lens planetary markings and details that I have never seen even with the largest telescope in Cambridge.

Desire is Weak Without Resolve

By Margaret Stowe.

MANY times in this column you have been told that you are what you will to be.

It is such an important truth that I do not think it can be repeated too often.

Parents could do so much for their children by training them along those lines and carefully guiding them to the point where they have the understanding to choose for themselves the sturdy qualities of mind.

Teach them that it is will—force of purpose—that enables a man to do and to be whatever he sets his mind on doing or being.

It is not a new saying that "Whatever you wish, that you are; for such is the force of our will, joined to the divine, that whatever we wish to be, seriously, and with a true intention, that we become."

No one ardently wishes to be submissive, patient, modest, or liberal, who does not become what he wishes.

You have possibly heard the story of a working carpenter, who was observed one day planing a magistrate's bench which he was repairing with more than usual carefulness; and when asked the reason, he replied, "Because I wish to make it easy against the time when I come to sit upon it myself."

This same carpenter actually lived to sit upon the bench as a magistrate. The strong desire for that position that the man had could accomplish nothing without resolve, or force of purpose.

Each one of us feels that he is free to choose between good and evil—that he is not here to be blown to any or every direction by the wind, but that he has within him the power to direct his own movements, and is capable of pushing along on the path of his choice no matter how strongly the wind may blow or how often it may change.

This will, or force, of purpose is the only thing that is wholly yours, and it rests with you individually whether you give it the right or the wrong direction.

Your habits or your temptations are not your masters, but you of them.

The advice that Lamennais once gave to a gay youth is something that each one of us might read and take home to ourselves with some benefit.

He said: "You are now at the age at which a decision must be formed by you; a little later you may have to groan within the tomb you yourself have dug, without the power of rolling away the stone.

"That which the easiest becomes a habit in us is the will. Learn then to will strongly and decisively; thus fix your floating life and leave it no longer to be carried hither and thither, like a withered leaf, by every wind that blows."—New York Journal.

HORTICULTURE

EARLY TOMATOES.

The earliest tomatoes are those that are rather small in size, especially the varieties that grow in clusters. The best varieties are the late ones, though seedsmen are now offering new varieties that are somewhat early, as well as being much improved in quality. Every garden should have a few tomato plants.

KILLING A TREE.

The surest way to kill any kind of tree is to pile a heap of stones around it. The reason appears to be that the stones obstruct the light and act as a mulch to the soil, causing the tree roots to feed near the surface. But the stones are no obstruction to frost, so that the soil under them is usually deep frozen, and the roots, being encased in frozen soil, cannot supply sap to the tree, as all roots should do to some extent, even in winter.

PLANT SOME SWEET PEAS.

If only one flowering plant is grown the one to choose is the sweet pea. It is easily grown, gives plenty of flowers for a long time, and is as gay and cheerful as a flock of humming birds. Sow as early as common peas and treat in the same way, except that wire netting is more neat and satisfactory than brush. If brush is used, sow the seed in small clumps and set the brush around it, growing half a dozen plants to the clump. With mixed varieties this plan gives a beautiful effect.

SAVING FRUIT TREES.

In some parts of the West box irrigation is practical as a cheap method of saving fruit trees, vines and gardens from drought. The boxes are made of rough planks, usually about six inches in length, and inserted in holes a foot or more in depth, a few inches from the tree or plants to be irrigated. Water is filled in the boxes and left to find its way to the roots. This places the water where it will do the most good, precludes the possibility of waste, and overcomes the objections to surface irrigation.

POWDERY MILDEW.

Powdery mildew ordinarily affects young cherry and apple trees. It appears in white spots on the leaves; the fungus threads send little suckers down in the plants' cells and absorb the juices there. Black spores are formed later, and these, with their thick walls, live safely through the winter and germinate in the spring. The disease defoliates young trees and robs older ones of much nourishment. Burning the leaves in the spring is an effective preventive. Finely powdered sulphur dusted over the diseased parts of a tree kills the fungus, and potassium sulphide solution—one-half ounce to a gallon of water—is nearly as effective.—The Cultivator.

AN ENEMY OF THE CHERRY.

Frequently the black cherry tree lice so completely cover, distort and smear with excrement the cherry leaves that they are disgusting to behold; they not only stop the growth of the tree, but take much of the nourishment that should go to the fruit while maturing. As with all plant lice, they winter in the egg stage, hatching early in the season into females which soon commence to produce young, and by the time cherries are ripe we have several generations, each of which is producing young each day. About July the lice disappear to the roots or to other plants. In the fall winged males and females are produced and the females return to the cherry trees, there depositing their eggs around the buds.

Remedy.—If kerosene emulsion is used on the lice before they roll and knot the leaves around themselves, they can be very easily killed, but when protected by the leaves it is difficult to reach them with any remedy.—National Fruit Grower.

A NEW ANNUAL.

One of the newest annuals that may be started from seed in the spring with every assurance of success belongs to the Petunia family. The new star Petunia is one of the most curious of the season's novelties because of a

NEW STAR PETUNIA.

distinctly outlined and variegated star that appears in the centre of every open flower. The petals, which serve as a background, are of rich and varied shades of velvety crimson and rich maroon, while the five-rayed star, broadening half-way up, then narrowing to a point near the margin of the flower, is of pure snowy white or tintings of blush or pink.—Philadelphia Record.

SCIENTIFIC & INDUSTRIAL

It is estimated that the standing timber of the Dominion of Canada equals that of the whole continent of Europe, and it is double that of the United States.

The turbine plants that have been in operation during the last few years have shown high economy and call for practically no repairs. Compared with passenger steamers of similar size, but having reciprocating engines, the installation of turbines has shown a gain per indicated horse power in favor of the turbine steamer of twenty per cent.

Lord Kelvin has suggested that living spores from other planets might be thrown off into space by the perpetual hurricane of their upper atmosphere and come within the earth's sphere of attraction, be drawn to it, and then be developed. This theory of the origin of life upon the earth is as plausible as the "fortuitous concourse of atoms" theory of life's origin.

Electricity is making rapid progress throughout Spain. At the end of last year there were no less than 630 cities, towns and villages in Spain with an electric power station, and there were only 430 towns with a population of more than 4000 souls where electricity had not as yet made its appearance. In the district of Barcelona alone there are now over 850 turbines in use, representing 35,000 horse power.

In order to determine the density of the earth, President F. W. McNair, of the Michigan College of Mines, and Major John F. Hayford, of the United States Coast and Geodetic Survey, will conduct experiments at the Tamarack mine, which is particularly well fitted for this purpose, since its shaft is one of the deepest in the world, penetrating to a depth of 4550 feet in strata of uniform density. The density of the earth is largely a matter of scientific conjecture. It has been computed by formulae based on Newton's laws of gravitation. It is true that Sir George Biddel Airy, the British Astronomer Royal, computed the earth's density from experiments which he carried on at a Welsh colliery, but the figures which he obtained varied so much from those based on the formulae that they have not been generally accepted.

The substitution of working on a large scale, with heavy capital, for the individual operations which characterize a new placer mining country, is quietly but rapidly going forward in the Yukon region, says the Engineering and Mining Journal. While some hydraulic work has been done, the conditions are such that it will probably never be an important element in the region. Dredging in the rivers and creeks was tried this season with such success that next year it is probable a large number of dredges will be at work, despite the short working season. Already much machinery for dredge work is on the ground, ready for next year. Over 4000 quartz claims were filed during the last season, and while the majority of them will amount to nothing, a large amount of exploration and development is certain.

A Doze in Division Lobby.

I once saw Mr. Gladstone fast asleep in one of the division lobbies, while a division was actually going on. It showed how utterly tired out he must have been, for usually when he was going through a division he rushed to find a table, and started to write either a letter or the dispatch to the Queen in which he nightly recounted the events of the Parliamentary sitting. On this occasion there was no doubt of his being asleep. Members paused for a moment as they passed. It was a dark hour in the fortunes of the Liberal leader, for his Government was breaking up, and he himself was within a few weeks of his everlasting farewell to public life. His followers were touched as they saw in the strangely pallid face, in the drawn lines and in the slumber of utter fatigue the signs of coming disaster and final fall.—London M. A. P.

Fish Ate Their Young.

A pair of catfish that were continuously watched in a Government aquarium made a nest by removing the gravel from a corner. During the first few days after hatching the fry, banked in the corners of the tank, were at irregular intervals actively stirred by the barbels of the parents, usually the mate. Subsequently the parents were seen to suck the eggs into their mouths and then extrude them with some force. The predaceous feeding habits of the old fish gradually overcame the parental instinct; the tendency to suck the fry into their mouths continued and the inclination to spit them out diminished, so that the number of young dwindled daily and the 500 that had been left with their parents had completely disappeared in six weeks, although other food was liberally supplied.

The Spectroscope's Usefulness.

In the field of astronomy the spectroscope is often more serviceable than the telescope, for by its means have been discovered dark, planet-like bodies which revolve about the stars, and which a telescope thousands of times more powerful than any we now possess could ever reveal.

Germany's Maritime Position.

Germany has built the finest, fastest vessels afloat, although she is not geographically a maritime country, and no other country is so largely dependent on others for the raw materials which enter into the making of a ship.