LOVE REGNANT.

Where'er I read in mournful history
  How all things crumble at the touch of time,
And even great deeds, renowned in mighty rhyme,
Show but as cities buried 'neath the sea,
Which, in calm days, men gaze on awfully,
My heart grows heavy; but one thought sublime
  Rises, and therewith the uplifting chime
Of morning stars comes back rememberingly:
Woman, thou art that thought, in whom I know
  That I alone gave Time his tyrant might,
Dropping my foolish lids of clay too low,
For, looking up, I see great Love, far, far
Above all changes, like a steadfast star
  Behind the pulsings of the northern light.
—James Russell Lowell.

An Incomplete Introduction

The express to the north was on the point of starting. A girl was leaning expectantly out of the window of a carriage containing only one other occupant—a man, in the far corner, who was looking with undisguised admiration at the girl's charming, animated profile. Another girl came running along the platform.

"Here are your papers, Ethel; I thought I should not be in time."

"Thanks, Marion, and good-bye!"

As they shook hands, the man in the corner came forward.

"Why, Stanley!" cried the girl on the platform. "Going to Trevor grange?"

The guard's whistle sounded. There was a banging of doors.

"Why, of course, Ethel—Oh, I forgot, you have never met." The train began to move. "I must intoduce you," she cried, running to keep pace with the moving carriage. "Ethel, this is my cousin, Stanley Mortimer——" But the train having gathered speed, she was left far behind on the platform.

In the carriage, the two laughed.

She had heard much of Stanley Mortimer. That he was a very handsome fellow, she could now judge for herself; but she was wondering whether, as she had been told, he was such a consummate flirt, captivating girls easily, making love and leaving victims on his path wherever he went while he himself remained untouched by the tender passion.

He wondered who she was. How silly of Marion not to have begun the introduction in time to inform him of his companion's name. Anyhow, he

HE WONDERED WHO SHE WAS.

would have first innings and make headway with her before any of the other fellows at Trevor grange should even have a chance of looking at her.

She smiled sweetly, making some remarks on the length of the journey.

"Oh," he observed, it cannot be too long for me."

"Indeed?"

"Under present circumstances, yes."

"You mean, of course, the return of fine weather," she said, innocently.

"I mean," he answered, "the privilege of the society of a charming fellow guest."

"Oh, well," she laughed, "you will have the pleasure of many charming guests' society at the journey's end; the house party is to be a large one."

"Still, I should prefer to retain the present delightful situation as long as possible."

"Would you? I suppose you have stayed at the grange before?"

"Oh, yes, some time ago, before Harry Trevor was married. He has just returned from abroad and is to be there with his wife. You know her?"

"Very well indeed," she replied, smiling.

"I have never met her, but I hear glorious accounts of her."

"People exaggerate so," she remarked.

"From which I may infer that you are not a blind admirer of Mrs. Harry?"

"I daresay she is all right. Of course," she continued, "you are acquainted with most of the guests you are to meet?"

"I have seen one of them, at any rate, and by the time that we arrive at our destination I hope the acquaintance will have ripened sufficiently to warrant my claiming friendship with her."

"So soon?"

"Why should it take longer? Nearly three hours' tete-a-tete should be equivalent to many days in ordinary circumstances."

"Perhaps so," she admitted, laughing.ing. "Besides, I have heard so much about you, that I seem to know you quite well; your reputation is a wide one."

"Indeed!" He laughed, well pleased; he was proud of the name of ladykiller. "But, as you remarked just now," he said, "people exaggerate so."

"Still one is bound to be a little prejudiced by what one hears."

"You mean that you believe me to be a flirt?"

"Well—aren't you?"

"Not a bit of it," he assured her. "You see, I believe that a man is bound to meet the one woman in the world whom he must love. Until he does, he naturally, in the hope of finding her, goes from one to the other. If his quest is a long one, he is accused of flirting with all the girls he knows, which is unfair. Such a man's love is far more worth having than that of a man easily won by the first pretty face he encounters."

"Still, is it necessary that this man while trying to find the woman who is to fill his life, should make love to girls whom he knows are not the one ideal?"

"You must admit," he replied, lightly, "that some girls are so ready to be made love to that they mistake ordinary courtesies for something different."

"Do they? Then all the more reason why men should be more circumspect."

"You may be right. My attentions to girls might, in reality, have been flirtations; my excuse is this: that was before I met you."

"Have I converted you, then? Are you really never to flirt again?"

"You understand, do you not, that having met the one woman I longed for, my flirting days are over?"

"And how many times before now have you thought that you had found her?"

"I may have thought so more than once," he admitted, laying his hand softly on her gloved one, "but I do not think so now—I know."

She gently disennaged her hand. He thought he had gained an advantage, and tried to pursue it.

"You will believe," he said, impressively, "that you are the one woman for whom I have waited."

They were approaching the country station to which they were bound.

"At any rate, we may consider that you have secured the friendship which it was your desire to claim at the end of the journey."

She fluttered her handkerchief out of the window. "That is the car from the grange," she explained.

Again he tried to secure her hand.

"Friendship? I want more than friendship; I want your love."

"I am afraid I could not promise you that."

"Do you mean that there is no hope for me? Ethel—you will not forbid me——" The door of the carriage flew open.

"Here you are, Ethel; had a good day in town?" said a cheery voice. "Why, here is Mortimer, too! How are you, old boy? Let me introduce——"

"Mr. Mortimer and I traveled together, Harry," interrupted Ethel. "Marion introduced him to me in London, just as our train was starting; it made the journey so pleasant, and we have become such great friends, have we not, Mr. Mortimer?"

Mortimer followed, smiling to himself, she had laid such gracious stress on the fact of their new-formed friendship, her smile had been so brilliant and kind, that he thought her previous reception of his advances could only have been prompted by coquetry. Victory was at hand!

They were approaching a large motor, where sat a nurse with a one-year-old child on her lap.

Ethel took a quick step toward it. "Oh, the darling," she cried! "Let me have him, nurse."

"Harry," she said, "Mr. Mortimer has not seen our son yet; isn't he a love?" and she held up the lace-swathed child for Mortimer's inspection.—Ladies' Field.

LIPTON'S PUBLICITY METHODS.

Says There Is Much Virtue in Advertising and Quick Action.

"I dare say I owe a great deal of my success to advertising," says Sir Thomas Lipton in the Strand. "I always tried to get hold of some new method. To attract attention I used to post cartoons in my shop window. In later years, when my business had spread on one occasion I engaged an aeronaut to throw out from his car 10,000 telegraph messages addressed to one of my shops. I offered prizes to the first twenty people who arrived with a message, and, the finders coming from all parts of the city, much popular interest resulted.

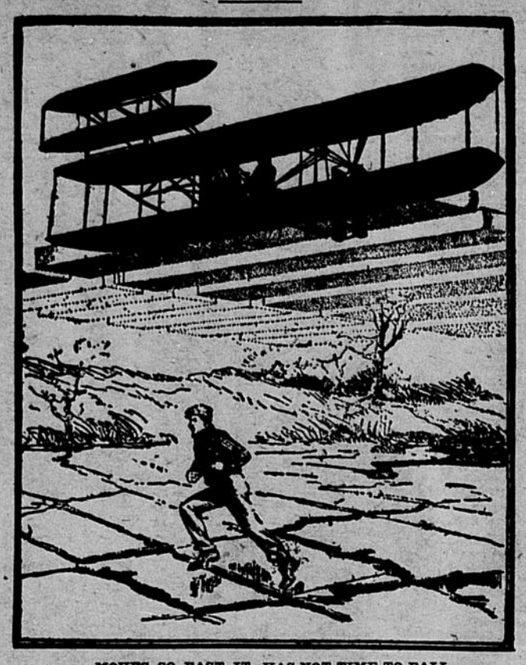
"Advertisement sometimes, as I have found, results most unexpectedly and from untoward conditions. About 6 I was awakened by the telephone bell ringing in my bedroom. Springing out of bed, I soon learned that a fire had broken out at my Newry branch. On arrival at the scene of the fire I found nothing could be saved, so I immediately telegraphed to my Dublin and Belfast stores and ordered a fresh stock of provisions to be sent by passenger trains. Meanwhile I found another shop close by, and at the usual hour the following morning I had the new premises in full working order. And there was more business done at the second shop than at the first. The fire, it appeared, had drawn public attention to us, and our smartness in opening another shop so quickly was practically appreciated."

There Are Some Funny Ones.

"Tell me," said the editor's friend, "who are the most humorous writers you have ever met?"

"Most of those who think they are serious writers," replied the editor.—Philadelphia Ledger.

SECRET OF AEROPLANE'S FLIGHT.



MOVES SO FAST IT HAS NOT TIME TO FALL.

Suppose you had to cross a lake covered with cakes of ice so thin that if you were to stand upon any one of them you would sink. To cross the lake you would have to run from cake to cake, so that you would not give yourself time enough to sink on any one of them. An aeroplane is very much in the same position. It must move so fast that it never has time to fall through any given section of air. Motion, therefore, is the secret of an aeroplane's flight.—New York Times.

THE YOUNGEST SOVEREIGN.

China, the oldest of nations, is ruled, if the expression may be allowed, by the youngest of sovereigns, a boy of 3. He is a nephew of the late emperor, and until his accession bore the name of Pu-yi, although the royal astrologers have selected as his official title Hsuan-t'ung, which means "General Proclamation." The boy, says a writer in the Overland Monthly, is in delicate health, and the Chinese are inclined to attribute this to his birth on the unlucky thirteenth day of the first moon. In order to escape the evil influence as far as possible, it has been decreed that his birthday shall be celebrated on the 14th of the month.

Further, he is to be brought up more hygienically than his predecessor was. He will have plenty of fresh air, and will not be expected to appear at the midnight audiences which are the fashion at the Chinese court. His first appearance in public—at his enthronement—was not a success, for he cried loudly; and henceforth his father, the prince regent, will attend all official functions alone, and will receive dignitaries of state, and offer up the required prayers for snow or rain.

He will also be responsible for plowing the first furrow at the spring festival at the Temple of Agriculture, for the worship of the Lord of Heaven on the white marble altar of the Temple of Heaven, and for the propitiation of the local deities who watch over the old city of Peking.

But the little emperor, although relieved from these duties, will not be allowed to forget that he is an official baby. He may no longer live with his own family, or see his parents except in the presence of the whole court. Twenty-four nurses will keep watch over him, and he has three wives already, aged 10, 12 and 13 years, each of whom receives an allowance of $400 a month.

The exact meaning of his new name, "Hsuan-t'ung," is difficult to render in translation, but the character Hsuan is considered very fortunate. A certain emperor of the Ming dynasty called himself "Hsuan Te," of "Proclamation of Peace," and the symbol is common on old Ming pottery.

Optimistic officials read into Hsuan-t'ung, or "General Proclamation," a reference to the promised constitution; and it is confidently expected that this child emperor, when he comes of age, will inaugurate a new regime of progress and reform in the government of China.

A Lavender Town.

One of the minor harvests that promise well is that of the lavender fields. I have seen some flourishing crops in the Hitchin neighborhood today. Comparatively few know of this quaint Hertfordshire town as an important lavender growing center, yet it has grown the sweet old herb (which the Romans called lavendula when they used it to scent their baths), has distilled the flowers and sent their extract into all parts of the world for more than a century. The Hitchin district had less rain and more sunshine than the London area during the month which has just closed, and consequently the long, trim rows of lavender plants in their dusky green look strong and healthy. They are beginning to show their flower buds, and there is every likelihood of an abundant yield at cutting time, which will be from three to four weeks hence. At cutting time people come in from miles around to inhale the sweetness of the fields, and when the distilling begins the fragrance of lavender is borne on the wind two miles or more from the town. The flowers are put into the still with the fresh bloom of their maturity on them, and from six pounds of such flowers about half an ounce of oil is extracted.—London Daily Mail.

A Controversy Averted.

First Old Maid—Sh-h-h, Samantha, there's a burglar in the room!

Second Old Maid (with a sigh)—Well, Matilda, I suppose he's yours by right of discovery.

WITH HER HYPNOTIC EYES.

Australian Girl's Photograph Casts Spell Over London Admirer.

Miss Eleanor Wrightforth, a beautiful young girl living near Melbourne, in the Australian colony of Victoria, has for several years studied deeply all the books she could obtain on hypnotism, mesmerism, oriental occultism and kindred subjects, the London Tatler says. She has read of the wonderful experiments of Dr. Charcot, the French surgeon who put his patients in a hypnotic state and was then able to perform the most painful operations on them without anæsthetics.

She learned how to hypnotize persons herself and achieved very remarkable successes at it. Recently when she paid a visit to the photographer she fixed her eyes irresistibly with the steady gaze that she had learned by long practice to assume and said: "I will that the one who sees this photograph and can read the secrets that shine in my eyes shall come to me whatever the distance or obstacles that may separate us."

Miss Wrightford gave a few of the photographs to her woman friends, none to men. Months passed by without anything remarkable happening in connection with them, and she almost forgot about the hypnotic expression she had willed into them, until a little time ago, when she received a lengthy message through the photographer from a prominent Londoner who had fallen in love with the portrait, which came into his possession from a lady friend who had been paying a visit "down under." The susceptible Englishman, it is reported, is now on his way across the sea in order to plight his troth in person to the girl whose photograph he has fallen in love with.

SHORT METER SERMONS.

Selfishness.—Selfishness is the enemy of the home, religion and state.—Rev. C. E. Harding, Episcopalian, Baltimore.

A Man's Measure.—No man can be bigger than the God he worships.—Rev. F. W. Hinnitt, Presbyterian, Danville, Ky.

Church Work.—Present-day church work is to minister to all needs of men every day in the week the year around.—Rev. W. A. Bartlett, Congregationalist, Chicago.

The Soldiers.—Many of the professed followers of Christ are of the tin soldier variety, or like dummies dressed in uniforms.—Rev. R. L. Fletcher, Methodist, Pittsburg.

A Man's Success.—In worldly affairs a man's success keeps pace with his ambition. In religion his success keeps pace with his faith.—Rev. Voliva, Zion Church, Zion City, Ill.

God's Money.—We must be careful lest we use for ourselves the money which rightly belongs to the Lord, and thereby rob God.—Rev. L. M. Zimmerman, Lutheran, Baltimore.

Permanency.—Read the message of the skies and they tell of a permanency unknown amid the shifting scenes of this world.—Rev. Henry Hepburn, Presbyterian, Aurora, Ill.

Purpose of the World.—The purpose of this world is that men may know, love and labor, and thus come to the likeness of the creator God.—Rev. L. A. Henley, Baptist, Providence.

Morals and Politics.—It must be remembered that every political campaign has in it a moral element. Morals cannot be divorced from politics.—Rev. L. G. Broughton, Baptist, Atlanta.

Our Need.—The greatest need to-day is not more men, but more man. Not more women, but more woman. To be rich in deed and in truth is ultimately a consciousness.—Rev. J. Montgomery, Methodist, Denver.

Inward Life of Christianity.—The inward spiritual life of Christianity has not only touched the manners and customs of the people, but it has changed the entire intelligent life of mankind.—Rev. G. B. Vosburgh, Baptist, Denver.

Salvation.—Salvation means more than simply a kind of ticket to heaven.—Rev. C. H. Jones, Baptist, Louisville.

Crimes.—There are many crimes on earth, but one only in heaven; and that is not to love.—Rev. Frank Crane, Congregationalist, Worcester.

A Practical Religion.—Jesus became a man of the world and was familiar with the lowly things of life in order that He might show to the world that all men could carry their religion to to their work, their pleasure, their relations with one another and their material activity.—Bishop Henry Warren, Methodist, Denver.

Just to Remind Him.

A Cleveland man, who visited friends in Hants, England, last year, tells the following story of a canny Scot, a beadle, whose habit is to show tourists the remains of the abbey in his parish.

One day he had thus conveyed a party through the place, every member of which had tipped him with the exception of a crabbed old fellow of his own nationality.

As the offender left, the beadle whispered in his ear.

"Weel, when ye gang home, if ye fin' oot that ye have lost your purse, ye maun recollect that ye havena had it oot here."—Harper's Magazine.

Positive Proof.

A lawyer going into the parlor of his home noticed pencil marks on the wall, put there, as he rightly supposed, by one of his children. He called his little five and six year old son and daughter in to see which one had done the mischief. Of course each one blamed it on the other, so the father said, "Well, my son, a little bird told me he was sitting on the fence and saw you through the window marking the wall." The little fellow answered, "Get that bird and make him prove it."—Delineator.

A Diplomatic Reply.

An Eastern potentate once asked a group of his courtiers which they thought the greater man, himself or his father. At first he could elicit no reply to so dangerous a question. At last a wily old courtier said, "Your father, sire, for, though you are equal to your father in all other respects, in this he is superior to you, that he had a greater son than any you have." He was promoted on the spot.

Nearly every lazy person has enough industry to carry on a very large correspondence—fool letters about nothing except that "I wrote you last," or "you owe me a letter."

Paris has a store devoted exclusively to the sale of the accessories of aerial flight.

POLITICS OF THE DAY

The Rising in the West.

Mr. William Allen White, of Kansas, is a keen observer of tendencies political and has a forceful way of telling what he has seen. What he has said in the Republic about the determined warfare that Western Republicans have begun against Congressman Cannon and his methods of ruling the House from the Speaker's chair only confirms news that had been previously printed in The Republic.

Factional war within the Republican party in a number of States became certain when their Republican Senators and Representatives voted against the Payne-Aldrich tariff. All hope of reconciliation was thrown to the winds when President Taft, in his Winona speech, lauded the new tariff and practically read the insurgent Congressmen out of the party.

The President's speech was the signal for aggressive attack upon the insurgent Congressmen by the Republican organization in their several States, and they are striking back at Mr. Speaker, who was the President's ally during the special session.

Mr. White has good reasons for his conclusion that the war upon Cannonism is a war to the death. Mr. Cannon and other leaders of the Republican party have had abundant and convincing proof during the last four years that the Western demand for tariff reform will be satisfied by nothing less than a revision made in the interests of the people. As early as the spring of 1906 Mr. Cannon himself wrote to some manufacturers in Ohio that reform of the tariff could not be long postponed. He regretted it, while admitting that the demand for it was too strong to be resisted.

He has, therefore, sinned against against the light in steadfastly opposing tariff legislation up to the last moment, and then lending his powerful aid to make a mockery of the revision that could no longer be postponed. The opposition of the Western reformers to Mr. Cannon is not personal. They only insist that he be no longer invested with the powers of the Speakership.

The mistake which President Taft, Speaker Cannon and other supporters of the Payne-Aldrich tariff make is in underestimating the compelling force that lies in the will of a majority of the American people. That will is irresistible and it will have its way. The antimonopoly tariff reform Republicans will wreck the Republican party if they cannot get what they want by any other means.—St. Louis Republic.

Stop the Extravagance.

Customs receipts for the fiscal year have increased $22,000,000 and internal revenue $5,000,000 over last fiscal year, while the treasury deficit is $26,000,000.

Where is the promised era of reform and retrenchment?

President Taft proposes a big bond issue to reforestize Western lands denuded of their trees by lumber kings eager to seize the robber profits granted them by high tariffs. He favors a ship subsidy scheme that will cost $500,000,000 to restore a merchant marine destroyed by the tariff. He advocates a national issue of bonds to construct a waterway system which he himself says is as great an undertaking as the Panama canal.

In all the public utterances of Mr. Taft since the day of his inauguration there has been not one word of economy, not one hint of retrenchment. On the contrary, he has committed himself to vast increases of annual government expenses and monstrous additions to the national debt, which is more than $800,000,000.

When the President returns to Washington Nov. 10 he will have been in office exactly 250 days, 108 of which he has been absent from the capital.

With a large and growing treasury deficit and with delicate international problems arising out of the iniquitous tariff the need of executive supervision at Washington is apparent.

The people, who elected Mr. Taft to his high office and who pay him liberally for his services, hope that for the remainder of his term he will find it convenient to give somewhat more than 60 per cent of his time to affairs or state.—Chicago Journal.

Tariff Resentment Abroad.

Speaker Cannon's defense of the Aldrich-Taft tariff comes at an inopportune moment.

European nations do not act hastily in economic matters, but signs are not wanting that the Aldrich-Taft tariff has stirred up among them a resentment that can not but result in higher barriers against our exports.

Germany is especially indignant, and since, next to Great Britain, Germany is our best customer in the world's market-place her attitude may reasonably be viewed with concern. The Aldrich-Taft bill's provision that wholesale values of foreign goods imported into this country shall be fixed by American customs officers is the particular item that galls the Teutons.

To-day's news that France will enforce her highest tariff rates against American goods after the expiration of the trade treaty Oct. 31 causes no surprise.

France views with disappointment the higher tariff on her principal lines of export to the United States, and regards the maximum clause which increases the entire Aldrich-Taft tariff 25 per cent ad valorem April 1, 1910, as practically prohibitory of all French exports to this country.

All the countries of the Mediterranean are hard hit by increased taxation of their fruits and wines. Their exporters are using every endeavor to secure retaliatory action by their respective governments. All Europe seems to take the same stand as Canada.

Instead of forcing European nations to change their trade treaties and admit the United States on equal terms with the most favored, the Aldrich-Taft bill seems more likely to be met by indignant reprisals. Since these countries purchase from the United States far more goods than the United States purchases from them, the result of a tariff war would be more serious on this side of the Atlantic than on the other.

Such a contest would mean a wonderful development of Canada, South America and South Africa, with their vast natural resources, and an era of unprecedented prosperity for German and British manufacturers.

If You Had a Dog with No More Sense, What Would you Do with Him? —St. Paul Dispatch.

The Voice of the People.

Senator Aldrich, Congressman Boutell and other trust servants at Washington may imagine that their underhand and tricky methods have accomplished the aims of their masters without awakening the suspicion of the people. If so, they are much mistaken.

The people of the United States know that they are constantly and systematically robbed by the connivance of their representatives at Washington. They realize that the Senate is the head and front of this wrongdoing. They have experienced the top-lofty and sneering attitude of Mr. Aldrich and his fellow Senators regarding the working and producing classes. And just as British liberalism is preparing to discipline the House of Lords the American people are preparing to secure some show of popular government in the Senate at Washington.

Hereditary legislative power is against public policy, no matter whether inherited from a titled father or an uneatitled trust. In either case it comes of special privilege. Citizens under any form of popular government are fully aware of that fact.

Thirty-one out of forty-six States have decided that United States Senators should be elected by direct vote of the people. Thirty-one Legislatures have joined in the demand that Congress submit to the people a constitutional amendment to legalize direct election.

The day is fast coming when the Senate will no longer be a sovereign body, dictating to the House of Representatives, but a branch of legislative government, responsible to the voters, as the framers of the constitution intended.

The temper of the people is unmistakable. Direct election of United States Senators cannot be long delayed, and direct election of Senators will do more than any other one thing to hasten the downfall of Aldrichism.—Chicago Journal.

How New Zealand Became British.

How New Zealand became a British possession is one of the romances of colonization. Seventy years ago it was a sort of no man's land, but it leaked out that France contemplated annexation. There was a race from Sydney between a British and a French man-of-war, the former winning by a few hours and securing New Zealand for the British crown. A few years previously a French adventurer, Baron de Thierry, at the head of 100 followers, whom he had recruited in Sydney, had proclaimed himself "King of New Zealand," but the Baron had not sufficient funds to maintain a monarchy. His subjects deserted and his reign collapsed.

Hank's Vision.

Hank Stubbs—Seen one uv them big airships goin' over my house early this morning.

Bige Miller—Huh! Ef you can't tell an airship from one uv Granny Pembroke's ol' guinea hens you'd better stop goin' down suller.—Boston Herald.

The Old Story.

"Does your wife cry when she gets angry?"

"Yes," answered Mr. Meekton. "It isn't the heat of her temper that distresses me so much as the humidity."—Washington Star.

FARM AND GARDEN

Fertilizers and Manures.

The Ohio experiment station has carried on several series of experiments in the use of fertilizers and manures on crops grown in systematic rotations. In one of these experiments, located on the farm of the main station at Wooster, on a soil peculiarly responsive to the action of fertilizers and manure, there has been produced, from one of the treatments, a fourteen-year average increase to the value of about $8.50 an acre annually in a rotation of corn, oats, wheat, clover and timothy. The cost of the fertilizer producing this increase has amounted to $23 for each five-year rotation, or a little more than $4.50 annually, thus leaving a net profit of $4 an acre, or enough to pay the rental of the land. I know of no similar test in which results equal to this have been attained for so long a period. But on the same farm, stable manure, used on a rotation of corn, expects that in the average the increase in value of the animals fed will pay for the feed and care, leaving the manure free of cost. And this very fact that the manure is looked upon as a product that has cost nothing leads to neglect in its management, so that a very large proportion of the manure produced on our farms is lost before it ever reaches the field.

In Need of Farmers.

A Georgia newspaper, commenting on the cry from one of the counties of that big state for 1,000 more farmers, remarks that there are 146 counties in the state which need as many, the chance of getting good farmers. All neglected Georgia lands is better than the chance of getting good farms. All the Eastern and Northern states sadly need good farmers, competent, intelligent, up-to-date men to till the soil properly and get from it the largest and best crops with the least possible expenditure of toil and money, the New York Times says. A fair share of both capital and labor is needed in agriculture, of course, but intelligence, a good measure of enthusiasm, the will to learn and the ability to apply learning practically are more essential.

New York state needs farmers of the best sort as badly as Georgia needs them, though perhaps not so many, 146,000 swooping down at once on the abandoned, neglected or ill-managed farms of the Mohawk Valley and the upper and lower tier counties would scarcely be able to find land enough to work on. There are some intelligent farmers in New York and New England, but not many in comparison with the poor and shiftless ones. The modern farmer must adapt himself to modern conditions. He should know how to market crops as well as grow them. He should not be content to do things the way his honorable but benighted forefathers did them. He need not, if he have his wits about him, be controlled by middle men. His market opportunities are enormous. The development of chemistry and mechanics has greatly increased his chances of making agriculture profitable.

Neglect of Drainage.

It is necessary to closely study the physical conditions of soils, that we may have healthy and flourishing condition of plants. Through want of proper drainage or other neglect, land is often allowed to get into an unhealthy state, which sooner or later is reflected in the character of the herbage growing upon the soil.

The chief danger is probably poor drainage, with consequent excess of water and lack of sufficient oxygen in the soil. Such a condition is weakening and often results in the death of the roots of the plants growing in such soils. Especially is this so to crops growing in heavy clay soils, and where there is an impervious subsoil. In such cases many of the feeding roots of plants are killed by suffocation during protracted wet seasons.

Very often roots that may just be forming are killed in a few days, should the soil become saturated with water. Not only is there a loss of these feeding roots, but the vitality of the entire plant becomes weakened.

Plants growing where the surface is caked and packed often suffer from want of oxygen for the roots. This is especially applicable to trees. In such cases the annual growth is not only retarded, but the plants lose vitality and become prey of insects and fungus pests.

The remedy for such a condition is deep and careful cultivation, and the provision of some organic fertilizer. This will provide plant food for new growth of the roots and also lighten the physical nature of the soil. Lime is also recommended for this latter purpose in the case of heavy clay soils.

The roots of all plants must have a supply of oxygen. Deprived of this oxygen, they die of suffocation. The plant will be poisoned by its own decomposition products, and will starve or become the prey of parasitic enemies.

Sugar Beets and Beet Sugar.

Though sugar can be extracted from many plants, the world's supply of sugar comes at present from only two plant species, sugar cane and sugar beets, and it comes about equally from each. The former is grown only in tropical or sub-tropical climates, the latter only in temperate climates.

The great bulk of the beet sugar consumed is made in European countries, Germany, Russia, Austria-Hungary and France being the leading producers. But in recent years the industry of the United States has come into prominence. There are now 64 active beet sugar factories in this country located in 16 different states. Last year the farmers of these states harvested about 365,000 acres of beets, and delivered to the factories 3,415,000 tons of beets. From these nearly 426,000 tons of refined sugar was made. The yield of beets per acre was 9⅛ tons, and the yield of sugar per acre of beets was 2,334 pounds.

The United States Department of Agriculture has just issued its annual report on "Progress of the Beet Industry in 1908." One marked feature of progress is seen in the improved quality of the beets grown. The entire beet crop for 1908 averaged 15¾ per cent of sugar in the beets. The factory processes have also been improved until the refined sugar produced is about four-fifths of that contained in the beets.

One of the instructive features of this report is an account of the use of by-products. The beet pulp from which the sugar has been extracted is a valuable stock food, and vast quantities of it are fed in the fresh state to cattle and sheep. It finds especial favor with dairymen. A dozen or more factories have installed plants for drying pulp. With this is mixed molasses, the product being put on the market as "dried-molasses-beet-pulp." The molasses is also extensively used in the manufacture of alcohol.

The prospects for further development of the industry are reported to be good. Plans are on foot for the building of several new factories.

Telling Age of Poultry.

English authorities hold that there is no certain test of age for poultry, but they admit and indorse the experience of the writer that in general the spurs both of hens and cocks will distinguish a 2-year-old bird, but there are exceptions in which really young birds develop old-looking spurs, while really second-year birds preserve the short, rounded spurs of a cockerel.

The texture of the legs is a guide to some extent, and so is the delicacy and freshness of the skin of the face and comb, but still an occasional hen will preserve her youthful appearance to a startling degree.

The skin of the body is a better test, becoming coarser and drier looking with age.

Formerly the wing feathers were considered an absolute test as between a pullet and a hen, even after the long practice of early breeding had made the molting of early pullets quite common.

To a certain extent the absence of pullet quills is regarded as evidence of greater age, but for some time these feathers also have been becoming more and more uncertain as to the actual fact, unnaturally early hatching having upset all the old rules.

It is more difficult to judge the age of water fowls than of other poultry, partly from the absence of spurs, partly from greater longevity, and partly because the water keeps their legs soft and fresh.

Ducks waddle more heavily as they grow older, and after two or three years acquire a depression down the breast.

An abdominal pouch of great size indicates great age in geese.

Turkeys up to a year old are said to have black feet, which grow pink up to 3 years of age, when they gradually turn gray and dull.

Age in pigeons is often told by the color of the breast. In squabs the flesh looks whitish as seen through the skin, but becomes more and more purplish as the bird grows older.—M. K. Boyer.

Migration to the Country.

The loss of employment through the contraction of industrial output as an incident of the dull times of the past two years has led thousands of workmen to listen to the call of the soil. To be a high-salaried employe when business is booming is one picture, and to walk the earth seeking employment and finding none is quite another side of a mechanic's condition. While mining and manufacture have been greatly reduced in the magnitude of operations, there has been no cessation of activities on the farm. Everywhere in the past two seasons farmers have not only produced bountiful harvests, but all the products of the farm have sold at good prices.

The movement of population to farms is reported to have been of extraordinary proportions during the past twelve months. Several government reservations have been opened for settlement, and in some instances the commonwealths have extended payments of lands over a period of forty years. West, South and Southwest there has been an extraordinary movement from congested cities to rural districts in answer to the call of the soil. Probably 50 per cent of the people who are making new homes in the country are unfamiliar with agriculture, but they possess the courage to try to become successful farmers. Others have migrated to the country, where no man is compelled to stand idle in the market place because no one gives him employment.

If one consults the agricultural press or the columns of the great metropolitan papers he will discover an unusual number of advertisements of farm lands for sale at very attractive prices. Vast tracts of land are purchased by syndicates and subdivided into small farms and sold on installment payments. Much of the land is located near great cities and sold in small allotments for truck gardening purposes. In Texas an acre of onions will often sell for $500 and small holdings furnish steady employment to one man when devoted to fruit or market gardening.

Agriculture is now recognized as the nation's leading industry, as the annual output of the farms has attained a value of $8,000,000,000. The majority of the exodus from cities to localities west of the Mississippi will devote their energies to agriculture. While the government practically has no more land to give to settlers, there are plenty of large unimproved agricultural districts to supply urgent demand for small farms. With prices at their present high level agriculture has become the most stable and profitable of all the professions. The rapid increase of the non-agricultural population is one of the primary causes of present high prices for farm products.—Farmers and Drovers' Journal.

The 30,000,000 people of the Turkish empire are still practically without motor cars. The government is now about to spend several million dollars on good roads and between Damascus and Bagdad a motor car service is likely to be established soon.

To time automobile speeders two Massachusetts institute of technology professors have invented a camera which exposes two plates with any desired interval of time between, photographing a stop watch at each exposure.