Dr. Talmage Gives Advice to Those Seeking Salvation.

The Power of Evil Inclinations When One Acquired-Society Not Inclined to Aid the Pallen-The Lord Ever Ready to Help.

In a recent sermon Rev. T. DoWitt Talmalge discoursed on the subject: "How to Conquer." The text was: "When shall I awake? I will seek it yet again." Proverbs xxiii. 35. He said:

With an insight into human nature such as no other man ever reached, Solomon, in my text, sketches the mental operations of one who, having stepped aside from the path of rectitude, desires to return. With a wish for something better he said: When shall I come out of this horrid nightmare of iniquity?" But, seized upon by uneradicated habit and forced down hill by his passions, he cried out: "I will seek it yet again. I will try it once more."

Our libraries are adorsed with an elegant literature addressed to young men, pointing out to them all the dangers and perils of life-complete maps of the voy-age, showing all the rocks, and quicksands, the shoals. But suppose a man has already made shipwreck; suppose he is already off the track; suppose he has al-ready gone astray. How is he to get back? That is a field comparatively untouched. I propose to address my-self to such. There are those in this audience who, with every passion of their agonized soul, are ready to hear such a discussion. They compare themselves with what they were ten years ago, and cry out from the bondage in which they are incarcerated. Now, if there be any here, come with an earnest purpose, yet feeling they are beyond the pale of Caristian sympathy, and that the sermon can hardly be expected to address them, then, at this moment, I give them my right hand and call them brother. Look up. There is glorious and triumphant hope for you yet. I sound the trumpet of Gospel deliverance. The Church is ready to spread a banquet at your return and the hierarches of Heaven to fall into line of bannered procession at the news of your

emancipation. So far as God may help me, I propose to show what are the obstacles of your return, and then how you are to surmount those obstacles. The first difficulty in the way of your return is the force of moral gravitation. Just as there is a natural law which brings down to the earth any thing you throw into the air, so there is a corresponding moral gravitation. In other words, it is easier to go down than it is to go up; it is easier to do wrong than to do right. Call to mind the comrades of your boyhood days-some of them good. some of them bad-which most affected you? Call to mind the anecdotes that you have heard in the last five or ten yearssome of them are pure and some of them impure. Which the more easily sticks to your memory? During the years of your life you have formed certain courses of conduct-tome of them good, some of them more easily yield? Ah, my friends, we have to take but a moment of self inspectien to find out that there is in all our souls a force of moral gravitation! But that gravitation may be resisted. Just as you pick up from the earth something and hold it in your hand toward Heaven, just so, by the power of God's grace, a soul failen may be lifted toward peace, toward pardon, toward Heaven. Force of moral gravitation in every one of us, but power in God's grace to overcome that force of enoral gravitation.

The next thing in the way of your return is the power of evil habit. I know there are those who say that it is very easy for them to give up evil habits. I do not believe them. Here is a man given to intoxication. He knows it is disgracing his family, destroying his property, ruining him, body, mind and soul. If that man, being an intelligent man, and loving his family, could essily give up that habit would be not do so? The fact that he does not give it up proves that it is hard to give it up. It is a very easy thing to sail down stream, the tide carrying you with great force; but suppose you turn the boat up stream, is it so easy then to row

Take a man given to the habit of using tobacco, as most of you do, and let him resolve to stop and he finds it is very difficult. Twenty-seven years ago I quit that habit and I would as soon dare to put my right hand in the fire as once to indulge in it. Why? Because it was such a terrific struggle to get over it. Now, let a man be advised by his physician to give up the use of tobacco. He goes around not knowing what to do with himself. He can not add up a line of figures. He can not sleep nights. It seems as if the world had turned upside down. He feels his business going to ruin. Where he was kind and obliging he is scolding and fretful. The composure that characterized him has given way to a fretful restlessness, and he has become a complete fidget. What power is it that has rolled a wave of woe over the earth and shaken a portent in the heavens? He has tried to step smoking or chewing! After awhile he says: "I am going to do as I please. The doctor doesn't understand my case. I'm going back to my old habit." And he returns. Every thing assumes its usual composure. His business seems to brighten. The world becomes an attractive place to live in. His children, seeing the difference, hail the return of their father's genial disposition. What wave of color has dashed blue into the sky, and greenness into the mountain foliage, and the glow of sapphire into the sunset? What enchantment has lifted a world of beauty and joy on his soul? He has gone back to tobacco!

O, the fact is, as we all know in our own experience, that babit is a taskmaster; as long as we obey it it does not chastise us, but let us resist and we find we are to be lashed with scorpion whips and bound with ship cable and thrown into the track of bone-breaking Juggernauts! During the war of 1812 there was a ship set on fire just above Niagara Falls, and then cut loose from its moorings, it came on down through the night and tossed over the falls. It was said to have been a scene brilliant beyond all description. Well, there are thousands of men on fire of evil habit coming down through the rapids and through the awful night of temptation toward the eternal plungs. O, how hard it is to arrest them. God only can

arrest them. Suppose a man after five, or ten, or twenty years of evil doing resolves to do right? Why, all the forces of darkness are allied against him. He can not sleep midnight and cries "God help me." He bites his lip. He grinds his teeth. He thes his fist in his determination to

hand fight with inflamed, tantalizing and merciless habit. When he thinks he is entirely free, the old inclinations pounce upon him like a pack of bounds with their muzzles tearing away at the flanks of one poor reindeer. In Paris there is a sculptured representation of Bacchus, the god of revelry. He is riding on a panther at full leap. O, how suggestive! Let every one who is speeding on bad ways understand he is not riding a docile and well broken steed, but he is riding a monster, wild and bloodthirsty, going at a death

How many there are who resolve on a better life and say: "When shall I awake?" But, seized on by their old habits, cry: "I will try it once more; I will seek it yet again!" Years ago there were some Princeton students who were skating, and the ice was very thin, and some one warned the company back from the air hole, and finally warned them entirely to leave the place. But one young man with bravado, after all the rest had stopped, cried out: "One round more!" He swept around and was brought out a corpse. My friends, there are thousands and tens of thousands of men losing their souls in that

way. It is the one round more. I have also to say that if a man wan to to return from evil practices society repulses him. Desiring to reform he sava: Now I will shake off my old associates and I will find Christian companionship." And he appears at the church door some Sabbath day and the usher greets him with a look as much as to say: "Why, you here? You are the last man I ever expected to see at church! Come, take this seat right down by the door!" Instead of saying: "Good morning: I am glad you are here. Come, I will give you a first rate seat right up by the pulpit." Well, the prodigal, not yet discouraged. enters the prayer meeting, and some Christian man with more seal than common sense says: 'Gad to see you. The dying thief was saved and I suppose there is mercy for you!" The young man, disgusted, chilled, throws himself back on his dignity, resolved he will never enter the house of God again. Perhaps not quite fully discouraged about reformation he sides up by some highly respectable man he used to know going down the street, and immediately the respectable man has an errand down some other

Well, the prodigal, wishing to return. tak's some member of a Christian association by the hand, or tries to. The Christian young man looks at him, looks at the faded apparel and the marks of dissipation, and instead of giving him a warm grip of the hand offers him the tip end of the long fingers of the left hand. which is equal to striking a man in the face. O, how few Christian people understand how much force and Gospel there is in a good handshaking! Sometimes when you have felt the need of encouragement, and some Christian man has taken you heartily by the hand, have you not felt that thrilling through every fiber of your body, mind and soul, an encouragement that was just what you needed? You do not know any thing at all about this unless you know when a man tries to return from evil courses of conduct he runs against repul- his finger in his own blood and wrote on a bad. To which style of habit did you the sions innumerable. We say of some man, rock near which he was dying: "Sparta or half a mile from the church. There are people in our crowded cities who live a thousand miles from the church. Vast deserts of indifference between them and the house of God. The fact is we must keep our respectability though thousands and tens of thousands perish. Christ sat with publicans and sinners. But if there comes to the house of God a man with marks of dissipation upon him people throw up their hands in horror, as much as to say: "Isn't it shocking?" How these dainty, fastidious Christians in all our churches are going to get into Heaven I don't know, unless they have an especial train cars, cushioned and upholstered, each one a car to himself! They can not go with the great herd of publicans and sinners. O, ye who curl your lip of scorn at the fallen, I tell you plainly, if you had been surrounded by the same influences, instead of sitting to-day amid the cultured and the refined and the Christian, you would have been a crouching wretch in stable or ditch, covered with filth and abomination! It is not because you are naturally any better, but because the mercy of God has protected you. Who are you, that brought up in Christian circles and watched by Christian parentage,

you should be so hard on the fallen? I think men also are often hindered from return by the fact that churches are too anx ous about their membership and too anxious about their denomination and they rush out when they see a man about to give up his sin and return to God and ask how he is going to be baptized, whether by sprinkling or by immersion, and what kind of a church he is going to join. O. my friends! It is a poor time to talk about Presbyterian catechisms, and Episcopal liturgies, and Methodist love feasts and baptisteries to a man that is coming out of the darkness of sin into the glorious light of the Gospel. Why, it reminds us of a man drowning in the sea, and a lifeboat puts out after him, and the man in the boat says to the man out of the boat: 'Now, if I get you ashore are you going to live in my street?" First get him ashore and then talk about the non-essentials of religion. Who cares what church he joins, if he only joins Christ and starts for Heaven? O, you ought to have, my brother, an illuminated face and a hearty grip for every one that tries to turn from his evil way! Take hold of the same book with him, though his dissipations shake the book, remembering that he that converteth a sinner from the error of his ways shall save a soul from death and hide a maltitude of sins.

Now, I have shown you these obstacles because I want you to understand I know all the difficuities in the way; but I am now to tell you how Hannibal may scale the Alps and how the shackles may be unriveted and how the paths of virtue forsaken may be regained. First of all, my brother, throw yourself on God. Go to Him, frankly and earnestly, and tell Him these habits you have, and ask Him, if there is any help in all the resources of omnipotent love, to give it to you. Do not go with a long rigmarole people call prayer, made up of "obs" and "ahs" and forever and forever amen!" Go to God and cry for help! help! help! and if you can not cry for help just look and live. I remember in the war I was at Antietam and ' said to a man: "Where are you hurt?" He made no answer, but held up his arm swollen and splintered. I saw

where he was burt. The simple fact is when a man has wounded soul all he has to do is to hold it up before a sympathetic Lord and get it healed. It does not take any long prayer. eber seben year; so 'cordin' to dat nights. He gets down on his knees in the Just hold up the wound. Oh, it is no small thing when a man is nervous and weak and exhausted coming from his evil ways. to feel that God puts two bottles in the window of a wine store. It man, I will stand by you! The mountains do." "Waal, my min's changed."-

was one long, bitter, exhaustive, hand to may depart and the hills be removed, but I will never fail you." And then, as the soul thinks the news is too good to be true and can not believe it and looks up in God's face, God lifts His right hand and takes an oath, an affidavit, saying: "As I live, saith the Lord God, I have no p'easure in the death of him that dieth,'

Blessed be God for such a Gospel as this! "Cut the slices thin," said the wife to the husband, "or there will not be enough to go all around for the children; cut the it of lead, which imparts a brilliancy unslices thin." Blessed be God, there is a full loaf for every one that wants it; bread enough and to spare. No thin slices at the Lord's table. I remember when the Master street hospital, in Philadelphia, was opened during the war, a telegram came, saying: "There will be three bundred wounded men to-night; be ready to to take care of them;" and from my church there went in some twenty or thirty men and women to look after these poor wounded fellows. As they came some from one part of the land, some from another, no one asked whether this man was from Oregon, or from Massachusetts or from Minnesota, or from New York. There was a wounded soldier, and the only question was how to take off the rags most gently, and put on the bandage, and administer the cordial. And when a soul comes to God He does not ask where you came from or what your ancestry was, Healing for all your wounds. Pardon for all your guilt. Comfort for all your

Then, also, I counsel you, if you want to get back, to quit all your bad associations. One unholy intimacy will fill your soul with moral distemper. In all ages of the Church there has not been an instance where a man kept one evil associate and was reformed. Among the fourteen hundred million of the race not one instance. Go home to-day, open your desk, take out letter paper, stamp and envelope, and then write a letter something like this:

"My old companions: I start this day for Heaven. Until I am persuaded you will join me in this, farewell."

Then sign your name and send the letter with the first post. Give up your bad companions, or give up Heaven. It is not ten bad companions that destroyed a man, nor five bad companions, nor three bad companions, but one. What chance is there for that young man I saw along the street, four or five men with him, halting in front of a grog shop, urging him to go in, he resisting, until after a while they forced him to go in? It was a summer night and the doors were left open, and I saw the process. They held bim fast, and they put the cup to his lips and they forced down the strong drink What chance is there for such a young

I counsel you also seek Christian advice. Every Christian man is bound to help you. First of all seek God; then seek Christian counsel. Gather up ail the energies of body, mind and soul, and, appealing to God for success, declare this day everlasting war against all drinking habits, all gambling practices, all houses of sin. Half-and-half work will amount to nothing; it must be a Waterloo. Shrink back now and you are lost. Push on and you are saved. A Spartan General fell at the very moment of victory, but he dipped to get rid of sin may seem to be almost a death struggle you can dip your finger in your own blood and write on the Rock of Ages: "Victory through our Lord, Jesus

O, what glorious news it would be for some of these young men to send home to their parents. They go to the post-office every day or two to see if there are any letters from you. How anxious they are

Some one said to a Grecian General "What was the proudest moment in your life?" He thought a moment and said: The proudest moment in my life was I sent word home to my parents that I had gained the victory." And the proudest and most brilliant moment in your life will be the moment when you can send word to your parents that you have couquered your evil habits by the grace of God and become eternal victor. O, despise not parental anxiety! The time will come when you will have neither father nor mother, and you will go around the place where they used to watch you and find them gone from the field, and gone from the neighborhood. Cry as loud for forgiveness as you may over the mound in the churchyard, they not answer. Dead! Dead! then you will take out the And white lock of hair that was cut from your mother's brow just before they buried her, and you will take the cane with which your father used to walk, and you will think and think and wish that you had done just as they wanted you to and would give the world if you had never thrust a pang through their dear old hearts. God pity the poor young man who has brought disgrace on his father's name! God pity the poor young man who has broken his mother's heart! Better if be had never been born-better if in the first hour of his life instead of being laid against the warm bosom of maternal tenderness he had been coffined and sepulchered. There is no balm powerful enough to heal the heart of one who has brought parents to a sorrowful grave and who wanders about through the dismal cemetery, rending the hair and wringing the hands and crying: "Mother! mother!" O, that to-day by all the memories of the past and by all the hopes of the future, you would yield your heart to God. May your father's God and your mother's God be your God forever!"

Why He Did Not Stay.

Young Fitzpeter (waiting for Miss Gusher to come down) to Johnny-Your sister has some very pretty flowers in the bay window, Johnny.

Johnny (who is always around)-Now you're talking, mister. She told Miss Bustler yesterday that she'd like to add you to the collection.

Fitzpeter (delighted)-Ah. how clever! What sort of flower did she propose to call me?

Johnny-A monkey plant. When Miss Gusher comes down to receive her caller, Johnny is alone, trying to tack the cat's tail to the floor. -Drake's Magazine.

-"Purfessor, I'se about come to de conclusion dat vou's triffin' wid me. Heah we bean 'gaged mo'n seben yeah now." "Yes, Missus Wubbleby, but you's probably 'ware dat de physiology state dat de human body change once science I hain't de same person wot mek dat 'gagement wid yo." "Yes, but de min' don' change ef de bod; Venetian artisans, and practically dic-Harper's Magazine.

A MEDLEY OF MARVELS. The Processes Employed in the Making of

Flint-glass is the general term for all the multiform utensils and ornaments (apart from windows and dark bottles) which make glass an omnipresent blessing in modern life. The distinctive peculiarity of flint-glass is the presence in like that of most other glass. The lack-luster surface of all the old objects | Kicker not only called him a horseof glass made before the English invention of a lead formula is noticeable. Lead oxide was originally used only in most expensive glass prepared from calcined flints. But gradually it has crept into many grades, down to the most common materials for household and fancy wares, and for all transparent bottles, giving them all a finer luster than was otherwise obtained until the recent invention of lime glass. And the costliest of all glass, that used for optical lenses and imitation gems, still gains its extraordinary weight and refractive power from lead. The honors of skill in flint-glass production are saloon in search of the Major. We broadly divided among the nations. England taking the lead in the crystal or purest flint-glass used for cutting: Italy (Venice) in colored designs more stranded wreck on the shores of time, brilliant than any made in the days of the republic, when flint-glass was not known; Switzerland in imitation gems: Germany in cheap vases; France in lens disks; and America in pressed glass and cheap tableware. Recently a cheaper flint-glass has been introduced into American pressed ware, in which lime is substituted for lead, yet which the beautiful Arabella Johnson, only retains much of the luster and clearness of lead flint.

Flint-glass is either blown, molded or pressed, and frequently all three same establishment.

A flint-glass factory is a most enter-

taining medley of marvels. As you enter the great building that surrounds the huge chimney the first impression is that you are in a human ant-hill rumbling with inordinate activity. Or perhaps the sensation is better described as a plunge into a purgatorial chamber of industrious demons. In the center the openings in the gigantic furnace dazzle you like glaring eyes from a soul of fire; but the glow comes really from molten glass in the dozen "monkey-pots" about the blaze. Scores of workers, boys, youths and men, throng in restless confusion. It looks as if every one were running about on some impish deed of his own fancy. But stand still and watch closely, and you will see it is all a great system of human clock-work, each movement fitting nicely into the whole effect. The men at the furnace, who seemed at first to be devils thrusting pitchforks into the blazing depths to toast their victims, are only gathering metal on their punties. When a sufficiently large lump has been collected the man wanders off with it. You think he will certainly burn some one with that burning ball of fire, they are all bustling about him so incessantly. But follow him carefully and you see him silently hand the tube to an older man, who blows the glass into a large globe, and sits down to play with it at a bench which has a horizontal iron bar on each side of him to roll the tube on. Back and forth he rolls it like a toy, and the glass keeps curiously changing its shape. He has made a hole in the globe and has enlarged it into a symmetrical opening, and now the glass is cooled so that he can do nothing more. Will anybody in all that hurrying crowd help him? Instantly a young man appears, and without a word he holds up to the cool glass his long tube with a disk of red-hot glass on the end. which fastens to it. The man at the bench scratches the globe, jars it, and it leaves his bar. Off the other man runs with it to the "glory-hole." where the broken end is quickly heated again into softness. Then he hurries back with it to the bench man, who renews his play. A couple of minutes more and suddenly you perceive that he has made a perfect lamp shade, which a stroke detaches from the iron rod into a small bed of sand. A small boy carries it off on a stick to the annealing furnace, and now the gatherer is on hand again with a fresh lump of metal to begin the process again. Turn to the next man sitting at his work, and you notice him finishing a smaller charge into a lamp chimney, shaping the top by a mold. Here is a man amusing himself with a small bunch of soft glass on his rod. You are sure he can have no serious purpose in turning and bending it into those ridiculous shapes. Quickly a boy seizes it from him, and you can not trace him. It has gone over to a fancy vase, where it was needed to complete the ornament. So each bench has its own little task of skill, and keeps repeating it over and over, and each boy of the multitude (there are two or more to every man) has his own particular duties. He pops up always in the moment and place where he is needed. All the workers are busy as their wits can make them, for they work by the piece, and the number of things made determines their wages. They are grouped into sets or "shops" of three or four, who work together and share profits together on a well-understood grade of division. Generally four constitute a shop, the most skilful work-man (the blower) at the head, the gatherer (a young fellow) next, and two boys, one handling molds or tools, and the other carrying the products to the annealing oven. The only way to learn the glass trade is through long apprenticeship in these four stages. And no apprentice is permit-ted to enter the full privilege and wages of a master-workman without the consent of the order. By this severe means of apprenticeship the glassworkers keep the skill of their trade in

their own control, much like the old

THE ARIZONA KICKER.

Some of the Upe and Downs of Editorial Life in the West. We extract the following items from

the last issue of the Arizona Kicker: THE LAST STRAW .- For the last six months Major Davis, of this burgh, has lost no opportunity of abusing us and boasting of what he would do if we did not step softly. The reason for this conduct lies in the fact that the thief, but proved him a bigamist besides. Last Saturday the Major, who has no more right to that title than a mule has to that of "professor," borrowed a shot-gun and gave out that he had camped on our trail and meant to riddle our system with buckshot on sight. Word was brought to us, and although we were very busy at the time superintending our combined weekly newspaper, harness shop, grocery, bazar and gun store (all under one roof, and the largest retail establishment in Arizona), we laid aside our work and went over to Snyder's found him, and we gave him such a whipping as no man in this town ever got before. He lies a broken and so to speak, and the doctor says it will be six weeks before he will find any more trails or do any more camping. SLIPPED A Cog.-In company with

the elite of this neighborhood we were invited to the abode of Judge Graham last Thursday evening to witness the marriage of County Clerk Dan Scott to daughter of the aristocratic widow Johnson, of Bay Horse Hights. The widow had made a spread worthy of the days of Cleopatra, and Dan had on methods may be seen together in the a new suit sent by express from Omaha for the occasion. Everything passed off pleasantly until eight o'clock. at which hour the bride was discovered to be missing, and investigation soon brought out the fact that she had gone dead back on Dan and skipped the trala, whatever that is, with a bold cowboy named French Jim. She left a message to the effect that she could never, never love a man with a cataract in his left eye, and that meant Dan. There was a feast, but no wedding, and Daniel will have to try again.

> EXPLANATORY. - As several versions of the incident that occurred in our office Saturday night are flying around town and have probably been telegraphed all over the world, we deem it but right to give the particulars as they occurred. We were seated in the editorial chair, writing a leader on the European situation, when a rough character known around town as "Mike the Slaver" called in. As we we suspected no evil. As a matter of fact we reached for our subscription book, supposing, of course, that he wanted the best weekly in America for a year. The Slayer then announced that he had come to slay us, not because we had ever done him harm, but because the influence of the press was driving out the good old times and customs. We retreated towards the door of our harness department. He pursued us with a drawn knife. We then felt it our duty to draw our gun and let six streaks of daylight through his bedy, and as he went down we stepped to the door and sent a boy for the coroner. It was a clear case of self-defense, and the inquest was a mere formality. We lament the sad occurrence, but no one can blame us. We paid his burial expenses, and in another column will be found his obituary, written in our best vein and without regard to space. No other Arizona editor has ever done half as much.

No HARM DONE.—The boys got after a stranger the other evening who was pointed out as a horse-thief, and ran him all over town with the object of pulling him up to a limb. In some manner he gave them the slip, and in their zeal they got hold of Judge Downey and held him up to a limb for over a minute before the error was discovered. The judge is gu-guing around with a sore throat and stiff neck and threatens to bring about fifty damage suits. Take a friend's advice, judge, and hush up. You got off powerful easy, considering your general character. While it was a mistake, the boys were not so far wrong after all. We

wish such mistakes would occur oftener. Mrs. Colonel Prescott four pounds of prunes for half a dollar the other day Constable Button entered and asked us to step across the street to the office of Esquire Williams. We obeyed the request, and were at once served with a warrant charging us with keeping bales of hay on the sidewalk in front of the Kicker office to the detriment of pedestrians. As is well known, we run a grocery, feed store, harness shop, bazar and music house in connection with the Kicker, and the hay was out for a sign. We were tried, convicted and fined nine dollars—the grossest outrage ever perpetrated in the name of law. We shall bide our time. That is, we shall begin next week and show 'Squire Williams up as a drunkard. dead-beat, absconder, embezzler and perjurer, and if we can't drive him out of the country in six weeks we will complaint did it to get even with us for refusing to lend him our only button-behind shirt. From this out he is a marked man. We will begin on him hangs himself inside of a month.-Detroit Free Press.

-A gorilla in the Bombay zoological gardens takes a bar of iron two inches thick and bends it double in his hands, and with one bite of his teeth tate their own prices to employers.— wood. market immediately with great success - American Analyst

FARM AND FIRESIDE.

-Much of the success in growing root crops depends upon keeping them clear of weeds. Cultivate often; also the later corn. If there are no weeds a light soil is an excellent mulch in a dry

-Pig-pens in summer are an abomination. Thousands of pigs are kept in them at a loss, or with a doubtful profit, when with a small outlay for suitable fencing, they could have the benefits of grass and ground, and do better and make meat far more palata-

-There is always plenty to be done in destroying insect pests that injure! the fruits and vegetables in the orchard or garden. Whatever means are employed care should be taken to do thorough work from the time they make their appearance until they dis-

-Root lice, says an exchange, are more destructive to vegetation than those which prey upon the stems and leaves. The louse which attacks the roots of the apple tree is one of the most destructive of its class. This sest sometimes works on the naked trunk, where it may be detected by a mass of little granulations about the size of cabbage seed.

-Meadows should not be mown too close nor should grass become too ripe before mowing. When meadows become unproductive, despite the farmer's best care and treatment, then the remedy is to plow up the aged grass and release the soil from its indurated and inactive state by thorough tillage for a couple of years. Then if desirable, it can, by reseeding, be restored to its prime condition.

-Water from some wells is too cool to be given to animals. Especially in very warm weather it is judicious to draw the water long enough in advance to allow its chill to be removed before the animals drink it, especially if they are fatigued. A handful of fine corn meal stirred into a bucketful of water will be acceptable, and prevent injury from excessive drinking of cold water.

-The value of red clover has but recently become known, and in a comparatively very limited territory. though it was introduced into the Unite dStates some time prior to the Revolution, being known and cultivated by all the leading husbandmen of ancient Europe; but up to within a comparatively recent date its management was such as not to show its super-excollent qualities. But this is a scientific era, and the experiments lately made have developed fact after fact which have demonstrated beyond a doubt its superior qualities, not only for one use but for many.

THE PIGS IN CLOVER. Curious Scientific Origin of a Popular and Amusing Puzzle.

The "Pigs in Clover" puzzle had a rather curious scientific origin. A student in physiological psychology named Martenfeldt, while making researches in some determinations of the sensativeness of the tactile sense under the direction of Helmholzt, the great German investigator. found that the ability to balance a marble on a perfectly smooth piece of plate glass depended upon the delicacy of what is known as the reaction time, that is, depends upon the quickness or the nerve current in receiving the impression that the marble will roll. sending the impression to the controlling organs in the cerebellum that contract or relax the muscles of the arm. and the degree of responsiveness in the nervous end organs of the fingers which hold the piece of glass. Martenfeldt found that if he placed the marble in the center of the plate and marked four or five spots on the edges of the plate, and then asked the subject with which he experimented to tip the plate so that the marble would run across a particular spot, a considerable time elapsed before the subject could determine how to tip the plate to make the marble roll as required. When Martenfeldt completed the apparatus and placed rings of pasteboard about the center of the plate, with holes for the marble to run through, the average result of his experiments gave a remakable psychological law. This was that the "reaction time" depended upon the size of the circles of pasteboard which made an impression upon WE BIDE OUR TIME.—While selling the field of vision of the retina, and was in direct proportion to the diameter of the circles expressed in millimeters. Martenfeldt's experiments developed the fact that effects of practice and attention diminish the psycho-physical reaction; time and fatigue increases it. Thus he found that the will time necessary for choice between two motions was reduced by practice, for three subjects of experiment from .080 second to .050, from .097 second to .0535. and from .098 second to .062 respectively. For choice among five and ten possible motions the effect of practice was yet more marked; thus with five possible choices, the will time of one person was reduced by practice from .239 second to .083; and of another, with ten possible choices, from .358 second to .094. For each single day's series of experiments the time diminished faster at first than subsequently. forfeit a lung. The man who made the but in many cases more distinctly or. the second than on the first day of experiment. The apparatus used by Martenfeldt for his experiments got on the market as a puzzle in a curious next week, and we'll bet ten to one he way. Martenfeldt sent one of his plates to an American friend, Dr. Hermann Meyer, of Philadelphia, and at the Doctor's house a quick-witted business man of Waverly, N. Y., saw it, recognized how taking a puzzle it would make if simplified, took out a patent in February, and put it on the