Rev. Howard Melish. \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Brooklyn, N. Y.-In Holy Trinity Church, Sumlay morning, the rector, the Rev. Howard Melish, preached from the text, "From that time Jesus

began to preach and to say, 'Repent.'"
-St. Matthew iv:17. He said:
I heard one of the ablest men in America, a man who had studied the popular mind carefully and observed it most keenly, say not long ago, that if he were young again the one message he would endeavor to bring home to his countrymen is-spirit, soul, manhood make conditions not conditions men.

Three forces are producing the oppo-ite view. The first is materialism Materialism as a philosophy is discred Twenty-five years ago it received transendors importance through the formulation of a doctrine of evolution by natural selection. To-day it is not tught in a single university chair. But materialism, as a popular concep-tion of the world, is more generally heeded than ever before. In it God is identified with His universe. His name is Porce. His law is to be found not in the Bible, but in the latest text books physics. Man is an animal which thinks. He is a creature of his environment. When he dies he is dead

us every other beast of the field.

The second is the teaching of some latists. There is socialism and there is Christian socialism. Christian socialism etoleavors to make a place in so-cialism for Christianity's emphasis on the individual. Socialism is concerned with the economic and industrial reorgamization of society. As interpreted by some of its expounders it is telling men that they can't be just or right or pure or honest or humane under the competitive system. To talk about ethcompete to live is chie's play. The Sermon on the Mount is impracticable; let a man obey its precepts and he is sure to be thrown by the current of life on to the bank as wreckage. What is needed to make men is a different order of vociety. Such teachings, such feeling, for it has become more a feeling than a clearly acticulated system, has weakened the sense of individual responsibility. I can't be pure living under tenement house conditions. I can't speak the truth in a modern pul-pit or a modern newspaper, therefore am not responsible for impurity, dis-

The third force, laying stress on con-ditions instead of will, and so weaken lng individual conscience, is Christian Science. At first thought this may seem an utterly Inconsistent statement Does not Christian Science lay all the emphasis on the individual-his atti-tude of mind, his thought? Not at all What it emphasizes is conditions of thought. By methods which rival the methods of Hypatha and the Neo-Plamind into a state where nothing external to your mind has any reality Sin does not exist. The suffering of little children in the Home of St. Gdes the Cripple is a mere thought. The dishonesty of business has no reality. The tragedy of much of our tenement house life, with its starvation, unemployment, warfed lives, or the sinful luxuriousness of much of the "Fifth avenue" life are more thoughts. Jesus on His cross was only acting a part Such teaching has no social mes sage. Christian Science lias pro-duced some beautiful characters, "Is raelites in whom there is no guile," who recognize in Jesus, as did Nathaniel, "the Son of God," but it has not and cannot produce a social reformer to go into a dack slum and stay there, working and dying for the kingdom of God because it has no message to the conscience, individual

Over against these three forces which It is an old word with a long record. not know it. And these nations have Wealth corrupted them, power made them arrogant, and arrogancy led to national modness and ruln. They had voices waich, criticized and com-plained, which rillioned and despaired, but no voice with thunder and lightone nation developed a race of men whom we call prophets. They were men who spoke for God. The word of the Lord came to them. And they spoke that word to the conscience of their nation. They made men feel guilt, they pointed out the right way, stances when other nations have dis appeared, as in transplantation and ca, aivity, this nation was kept alive

gave birth to Christianity. Its imme-diate forerunner was John the Baptist. like the mountains; the poor man with his patience is to be filled up like the valleys. Start how: for the ax is hild to the root of your tree and down you will come if you don't have fruit. Share your abundance with those who have nothing; cease to squander your money on clothes and food when men are tasked and children are hungry. Stop lavying unjust taxes on the poor.
Ablide by the law and speak the truth.
Take what you earn and nothing more.

Josus caught up that message and crist "Report?" John had been preaching to classes as the prophets had preached to the nation. Christ brought the irith home to the conscience of the individual. Each one of you knows of his own self what is right. Then do it. Otherwise your religion is a shang. Your prayers are words. Your theofory is speculation. Only he knows God who wills to do His will. You have no peace in your soul, no joy in your life, but you are weary and heavy aden under all this luxury and formal ism. Your money is your undoing. Turn from it. Besolve to seek the tight and do it, come what may. Your fors will be those of your own house-hold. You will be as a sheep among wolves. But you will find peace and joy and will be really free. In this way He awoke the conscience of the Mediterranean world and quickened

How are we to arouse among us responsibility and quicken our individual and social pentance. But is not that preached by every pentance. But is not that preached by every evangelist? It is, and some men are touched by it. But when they go to the evangelist as men went to John the Baptist and others went to Christ asking "What wouldst Thou have us to do?" the auswer is "Stop smoking, leave off the use of alcohol, keep away from the theatre, join church, pray daily and read your Bible." This is the whole duty of man. And other men, virile

Christianity thus professed, don't fight \*\*\*\*\* \*\*\*\*\*\*\* \*\*\*\*\*\* -this is the age of religious telerance-but pass it by as good for women and

> I appeal to the conscience of every and woman here to-day. We followers of Josus Christ. Now. only His first word to the world is repent. He gave many more, but they all depend upon that for their real meaning. Until we truly repent Christianity for us is a scaled book. Have we repented? We have looked over our personal lives. Here was a fault, Here was a sin. There was a mistake. We feel ashamed of this. Henceforth n our personal lives we shall be dif-God forgive! And we feel for There it ends. ferent.

Ends in an age where there is more wealth than in any age of the world before; when that wealth is attained by some men, not by hard labor of hands or brains, but overnight; in an age when because of this wealth there is more inxury in a city like New York than in all the world fifty years ago; where men and women live for money and sell their souls for money! What should repentance mean to-day?

It is a message to those who have money. Search your consciences to see llow you came by your wealth. Can you say with Zaccheus, "Lord, if I have taken anything from any man by false accusation, I estore him four You know and I know that many of our fortunes have been dishonestly, illegally and unjustly accumulated. By false returns to State officials, by false use of trust moneys. by false use of the powers of Govern nt, by false business methods has this money been obtained. Repentance demands that restitution be made the individuals or the community from whom this money was taken. Search your conscience to see what wealth is doing to you. Since you entered into the possession of money by work or by inheritance are you a nobler man or a truer woman? Or has money made you little-souled, mean, narrow proud, extravagant, arrogant, superel ious? Give it away at once, every cent of it. It is better to go through life with no money than with money to go down into hell fire.

Money is sending thousands of men and women to what Jesus called hell, in this city. They got their wealth in defiance of God's and our country's law; they can only keep it by control ling legislatures and creating monopo ille. And what do they say? The fall back on conditions and dodge re strong on conditions and dodge re-sconsibility. Repent, Fail? You prob-ably will fail. Conditions are had in politics and husiness. But God bids you fail. Go forth as sheep among wolves and fail. You will save your soul alive here and hereafter. It is a message to those who have no money. Money itself is not evil, but the love of it, the last after it. Many a man who has not a dollar has the love of it, and is giving his soul to get it. It is his envy of the rich that is sin. If such a man had money he would become like the rich he now envies, for his soul is like his brother's soul. Circum stances may vary, one may live in Mulberry Bend and the other on Fifth evenue, but their souls are alike, idle rich man in his club and the Bow ery lonfer are one and the same breed. One has allowed himself to become the victim of wealth, the other the victim of poverty. Both are victims, not free

Therefore, to both allke, neither a rich or poor, but as men, conquered men, comes this message: Turn ye from your poverty and your wealth and with God's help stand forth free. Strip you, make you bare of this money and know the joy of bread earned in the sweat of your brow. Find work, any houest work, and do it like a man in the strength of the Lord,

When a man stops blaming condi-tions and takes to himself the responsibility for what he is and what he has done he has obeyed the first word of Christ-"Repent."

Gud's School.

social.

social section of separation of separation with put the one truth of separation.

In our Father's school are many benches. This life is school time. Whatever the word God writes on the top of your name and over until He gives you anothe word. Never murmur. Do your best to solve your problems. If they are If you are in the dark, say. "Speak, Lord, for Thy servant heareth." When you feel like com-pialning, listen. Be still before God. henreth. David said: "I was dumb, I opened not my mouth, because Thou didst it." That is better than moaning and la-menting, but let us leap from David to Jesus, and say: "The cup which My Father hath given Me, shall I not drink it." "Father, glorify Thy name." So shall we be made perfect through suffering.-Multible D. Babeock, D. D.

We Youch the Gold.

Same time ago, in one of our maga Have Touched the Gold," the exclaihat often thus in religious life persons "rough the gold" without seizing, pos-sessing and using it. How true this is We frequent the sanctuary, hear and handle the Word of Life, get a vision of the Cross, put the sacramental bread to our lips-we "touch the gold," and still leave it unrealized from year o year. For want of a little more resoluie faith, we miss "the unsearchable

Character is a Growth,

Great occasions do not make heroe or cowards; they simply unveil them to the eyes of men. Silently and imper eptibly as we wake or sleep, we grow and wax strong, we grow and was what we have become.-Canon West dolt.

A Legal Switch, The disgust of a layman with legal phraseology was shown in the will of Elphonzo Youngs, filed here, Mr. Youngs was a dignified, well-to-do gen tleman, best known for thirty years as a deacon in one of the largest Congre gational churches in Washington. He wrote his will himself, evidently start ing out to copy from some book form, which set the example in this form; "Being by the Grace of God in sound mind and body, and mindful of the un-

certainty of human life," etc. Then suddenly on the written page there appears a wild dash of ink and

"Rats! This is too formal, All that is about it is this: At my death I want my ever faithful and devoted wife, Amelia Loretta L. Youngs, to have and control everything I possess."-New York Times.

Father of Many Lives Alone. After being married three times and bringing up twenty children, William N. Crosby, aged 83, is living alone on

t's homestead farm at Brooks, Me.

THE

INTERNATIONAL LESSON COMMENTS FOR APRIL 15.

Subject: Jeous' Power Over Disease and Death, Luke vit., 1-17-Golden Text John xi., 25-Memory Verses, 14, 15-Topie: A Great Faith and Helper.

I. The centurion asks aid of Christ Ended-sayings." (vs. 1-5), 1, "Ended-sayings," The sayings recorded in the preceding chapter and in the sermon just preached. "In the audience," What Christ said He spoke publicly. In se eret He said nothing (John 18:20), "Into Capernaum," Where most of His mighty deeds were performed. Yet His miracles failed to produce repentance (Matt. 11:23). 2. "Centur-ion's servant." A centurion was a Roman officer, ranking with our cap-tain, who had charge of 100 men. This centurion, though a Gentile, was fa-vorable to the Jews, religiously inclined, generous and kind. The scr-vant was probably a slave.

3. "Heard of Jesus." Of His arrival at Capecraum. He must have known of His miracles before this, "Sent-elders." The leading men-the magistrates of Capernaum. "Beseeching Him." Earnestly entreating Him. ing Him." Earnestly entreating Him. These elders of the Jews must have been strongly attached to i.e centurion. "Would come." They evidently thought it would be proper for Him to go to the house, even though the centurion was a Gentile. 4. "Came to Jesus." Distress drives to Jesus, and Jesus comes to those in distress. "Instantle" That is compastly and with stantly." That is, earnestly and without a moment's delay. "He was wor-This is what the elders said of the centurion

"Loveth our nation." He was probably a proselyte of the gate—that is, one of those who embraced Judaism on the whole, but without becoming a procelyte of righteousness by accept-

II. The centurion's opinion of him-self (vs. 6-8), 6, "Jesus went," He was glad to go with them. He is the Savior of the Gentiles as well as the Jews. "Sent friends." This was the second deputation, and it is quite likely that the centurion also came himself. See Mart 5.3-S. "Trouble not thyself." If he had known Jesus better he would have known that Jesus was anylous to help him. "Not work." was auxious to help him. "Not wor-thy." He war only a Gentile and thus outsile of the favored nation. He regarded Jesus as a superior belt g. "To come unto Thee." He felt though he could not approach into the presence of one so great and so holy. "But say in ... word." He had probheard a few months before this how Christ had healed the nobleman's son when at a Cistance from him (John 4:46-54). 8. "Set under author-That is, under the authority others. He is confident that Jesus can as easily send an angel to cure this servant of his, as he can send a soldier on an errand. The centurion's falth rewarded

(vs. 9, 40). 9. "Marvelled at him." The only other time when Jesus is said to have been astonished is in Mark 6:6, when He marvelled because of unbellef. Christ was not ignorant of the centurion's faith, He knew all about that before a word had been spoken; but He expressed His admiration with a view to make it more conspicuous. "So great faith." Faith is that soul element which enables us to grasp God. It is the medium through which we receive the blessings of the divine life. "In Israel." After the return life. "In Israel." After the return from the captivity this term was given to all Jews. 10. "Servant whole," The healing took place at a distance The healing fook place at a distant from Christ. He could heal by a word as well as by a touch.

IV. The widow's son raised from the dead vs. 11-17. 11. "The day after." "Soon afterwards."—R. V.

III.

ifter," "Soon afterwards,"-R. V. "Much people," Jesus was now reaching the height of His popularity. 12, "The gate," Nearly all towns and villages were surrounded by walls as With the exception of kings, all burials were outside the city. "Much people," Here was a large company of m ers. Nain is approached by a narrow, rocky path; there was only one en-trance to the city; the two processions met on the western slope of the hill-side. 13. "Had compassion." He did not wait for her to ask for help, for probably she did not know Him. Her needs and sorrows were her silent prayers. The fact that this youth was "the only son of his mother," and that she was a widow would convey to Jewish notions a deeper sorrow than it even does to ours, for they regarded childlessness as a special calamity, and the loss of offspring as a dire punishment for sin. "Weep not." T

large company came to weep with her, 14. "Touched." Here again, as in the case of the leper, our Lord sacrificed the mere Levitical ceremonialism, with its rules about uncleanness, to a higher law. "Bler." Jewish coffins were open, so that the dead could be seen; but in the case of the poorer classes there would be no coffin, but merely a board supported by two poles on which the dead would be laid say." Life and death are controlled by the will of this "L" "Arise." A "Arise," At last death has met its Master!

15. "Began to peak." Which proved that he was fully restored.

16. "Came a fear." A sense of solemnity and reverential awe. "Giori-fied God." The miracle was witnessed by a large company of people, and they all recognized the hand of God on the One who could perform such mighty deeds. "Great prophet," The Jews were at this time expecting Elijah, Jeremiah, or one of the great prophets

to appear.

17. "This rumor." It appears that the report of this miracle spread throughout all Palestine; it reached the ears of John the Baptist who was imprisoned at Castle Macherus.

Disgruntled One Neatly Answered. George Harvey, the editor, was talk

ig about literary prize competitions "These competitions no doubt do good," he said, "but they excite a great deal of rage and bitterness. If for instance, there are 500 competitors for a prize it is likely that 499 of them will be dissatisfied with the award."

Mr. Harvey smiled. "Lucky is the judge," he said, "who an answer the disgruntled competitor s a friend of mine once did.

"My friend was the judge in a son net contest. Over 1,000 sonnets were submitted. My friend read them all. awarded the prize of \$25 to a young gentleman of Boston and in a few days received from another competitor a letter saying:

"Have you not made a mistake and given the prize to the worst instead of to the best sonnet?"

"My friend wrote back: 'No, for if I had the prize would undoubtedly have

### SUNDAY SCHOOL EPWORTH LEAGUE LESSONS

SUNDAY, APRIL 15.

The Resurrected Life,-Gal. 2. 23. The fact that we belong to One who has conquered death makes us sharers of his life. His victury came because he was the Lord of life. He desires to share his life with us. That was often in his thought: "I am the life;" "He that liveth and believeth in me shall never die;" "I am come that they may have life."

If we have given ourselves of Jesus Christ, to accept his lordship and his love, to be controlled by his feelings and his purposes, we belong to him. More than that; he identifies himself with us. We are branches of the V.ne. we are members of a body of which he is the head; we are one with him and with the Father.

Then we have come into a new life. We are "risen with Christ." There is joy unspeakable in that. But there is also duty. "If ye then be risen with Christ seek those things which are

This makes it possible for us to set our affections on the things which are above, that is, the things which abide the eternal things. It is not easy to care for these higher possessions un-less we possess the higher life. But when that comes, as it does in the moment of our complete acceptance of Jesus Christ, it is most natural that we should seek to live in the presence of Christ, We cannot live his 1 fo elsewhere

The Old Testament prophets be lleved in immortality. The living Christ and the regenerated Christian confirm that ancient faith.

The Bib'e and our human instincts make us think of death as an enemy. But death was beaten in the struggle for the life of Jesus Christ. Death will beaten in the struggle for our we accept Christ's gift of life

Death's sting is gone. Since there is now no condemnation, death cannot harm the Christian. It becomes his servant ushering him into the fullness

There is enough meaning to the Christian in the resurrected life or justify the whole vocabulary of thanks-giving. The great pain of life—the pain of unpardoned sin-is gone. The great battle of life-the struggle again t the power of death-is won

There is nothing like great saith in a great fact to hold people steady. The wer of the resurrected life was the secret of the early church's fearless It invigorates and tones all the church's real life to day.

## CHRISTIAN ENDEAVOR NOTES

APRIL FIFTEENTH.

Christ's Life. Lessons From His Resurrection Miracles .- John 11:1-46; Luke 7:11-17; 8:41, 49-56.

When Christ said of the dead Lazarus that he merely slept, He said that of all our dead.

If we believe in Christ, we have al-

ready entered the resurrection life, and death cannot even interrupt it.
What Christ said to the widow of Nain He says to all mourners: "Weep not, but rather rejoice, for your dear

one lives now in endless joy." Do not our fears regarding death, for ourselves and our beloved ones, still put Christ "to scorn"?

Suggestions. It was not merely that Christ told men about their immortality; He was

and is their immortality. Unless we begin before death to live "in the power of an endless life," we There is no surer test of the reality

of our faith than this: Do we look forward with dread to our death? The three persons whom Christ raised from the dead were martyrs, restored to this inferior life that we

might believe

Death, as Whittler says, Is a covered bridge over the dark river; but it glows, now, with a brilliant light.

Death is like a sleep, leaving the darkness and weariness of earth, and

waking where all is light, and strength The architect that built the house can surely rebuild it. No one can look with seeing eyes

upon the resurrection miracles of the spring, and doubt his own resurrection after the winter of death

Our Daily Bible.

It is good just to read the Bible daily, at any time and place. It is better to read it in a systematic way, at a regular time and place. It is best of all to study it thoughtfully, prayerfully, and with the best helps

With all your Bible-study, make sure each day, the first thing in the morning, of some soul-feeding sentence on which to live during the day.

The Bankrupt's Hymn.

There is a lawyer by the name of Hoxie out in Hampton, Iowa, who is noted within a reasonably limited territory as a consummate wag.

A few years ago a good old deacon in the Congregational church in that city, who had held many public as well as private offices of trust in the community, found himself on the verge of financial ruin. In endeavoring to recoup and save himself from insolv ency, he dragged a large number of his unsuspecting friends into the maelstrom, and was finally compelled to resort to bankruptcy. Now we will use Hoxie's own words in telling the sequel: "The day was set for the deacon's discharge in bankruptcy, and after he had got his decree, I was going home for supper, when I heard the sound of music. I listened, and noted that it emanated from the Congregational church. I was in a quandary. This was not Sunday, nor yet prayer meeting night. I approached and peered through the door. There sat Deacon P-, oblivious to every surrounding, his face wreathed as with a beatific vision, a copy of the hymnal before his face, and he was singing that old familiar hymn, 'Jesus paid it all!" "-Green Bag.

Town Has Many Old People.

In the quaint town of Sterling Mass., there are eighteen people who are over 80 years of age. Of this number two are men and the rest are not only women but widows.

# AUTO-KOTEL.

J. Pierpont Morgan's Partner Has a Remarkable Touring Car-

Cost \$23,000 People who drop into Sherry's for afternoon ten nowadays are likely to stop at the door to peep into a muchtalked-about automobile which is often standing there. It is the rolling palace, or, more accurately, the spinning private hotel of George W. Perkins. former vice-president of the New York Life Insurance Company and partner of J. Pierpont Morgan. Great wealth and the desire to apply

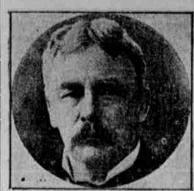
It to luxury in travel as well as keen zest in the game of outshining one's friends have produced some remarkable touring ears, but this big creation from Mr. Perkins' idea eclipses them all. The man whose testimony at the legislative investigation made a sensation has not spared expense in realiz ing his ideal of a conveyance that should take the place of the private railway car. And this purpose it serves for himself and family.

It cost \$23,000. The builders of the each are Frederick R. Wood & Co., of No. 210 West Ninetecath street. The chassis-the truck and running gearwas made in France. It required three months to complete it, much of the time being spent upon the interior, just as workmen continue long within a mansion after the walls and roof are

The part that may be referred to as the drawing room has revolving easy chairs, of course fastened to the floor. A chandeller of several bulbs and fine through the porous "septa" or partiworkmanship sheds a flood of light tions with which the ducts are filled. upon the table, large enough for a little supper or even a dinner. It serves also as a writing desk, and is equipped accordingly. On a long journey or during the wait of a breakdown a game of bridge can be played comfortably, and there is no danger of cold feet, for electric heaters are set at various sicists. The old toy of the hydrostatic points of the main room.

There are mirrors, a cabinet for the

G. W. PERKINS CIDES IN AN 1" CORPORAL" JAMES TAXNIR ger, Vesque, and others have obser

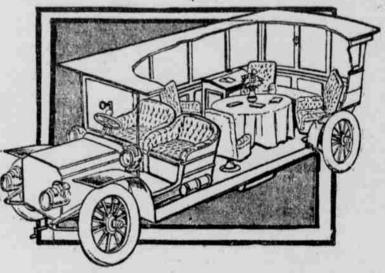


Commander-in-Chief of the Army of the Republic.

#### MAKES SAP ASCEND IN TREES?

The mechanism of the ascent of water from the roots of plants to the topmost leaves has long been one of the vexed problems of botamy. None of the suggested and partially received explanations satisfy everybody, and many botanists are content to confess ignorance. In a communication to Science (July 22), Professor George Mac loskie, of Princeton, suggests still another theory, which he is confident solves the problem. According to him, the water, so intermingled with air bubbles as to form a light foam, is supported by atmospheric pressure, while it moves upward by diffusing Says the writer:

"Recent discoveries by Yesque and E. B. Coeland and others have brought us very near the solution of this in veterate problem; but botanists seem agreed to halt at the last step, awaiting some occult signal from the phy paradox' ought to teach them that wa ter pressed upward by the atmosphere



G. W. PERKINS' NOVEL \$23,000 TOURING AUTO.

smoker's outfit, a pantry with an ice- | has no divine right to call a halt at chest, toilet cases, a clock, parcel nets, 1033 centimeters. One fluid may supleather cupboards, hatracks of cord and port and also elevate another fluid to other little conveniences.

ward or bedroom section is fitted with may be represented by a column of wacouch of good size, which is let down ter raised a mile high or more. The when needed. During the day or at condition is that there shall be no imany time when not in use the couch is mediate continuity of mass between so disposed of as to take nothing from the fluid to which the atmospheric the drawing-room space. There is a pressure is applied and that which is light over one end of the bed, so that to belifted. This condition is secured

one may lie and read. A feature of which Mr. Perkins is septa on its water-ducts, which presented in the transmission of air or water shade, producing a reflector and a shade composed entirely of glass, and view of the chauffeur. Within the cular diffusion of water and of every coach there is a board with electric thing dissolved in it." buttons. Seated in his reclining chair Mr. Perkins can say "Start," "Stop," 'Slower," "More speed," To do so he

button, and the thing is done A French horn spreads its bell over the head of the chauffeur. By a tube it is connected with the interior. If there is any communication not possible through the annunciator it can be made through the horn. Without raising his voice above the ordinary pitch Mr. Perkins can speak to the chauffeur lity of a wood-cell contains a bubble of On this side the interior surface of the and be heard distinctly. And the chauffeur, by lifting his head, with equal ease can talk back to the occu-

pants of the coach. Probably it is the most expensive touring car in the country. The upholstory is in the finest of Moroccan and Spanish leathers, imported especially for Mr. Perkins. The floor is covered with a costly rug. Seven persons can be accommodated. In the matter of speed it is the equal of any touring car extant. It is fitted with the best up- the square centimeter. Thus the atto-date mechanical contrivances known. New York Herald.

Put Away the North Pole, We are getting rather fired of the North Pole. It has been overdone. Every man who wants to be a hero and break into print trots off to discover the North Pole, and comes back afterward and tells us how and why he failed, and will we make up a purse to send him again? Sure to find it this time. It is getting to be a nuisance. it, anyway.-Tillamook Herald.

four story skyscrape in Pittsburg

any required height. Thus the sup-There is no partition, but the for- ported weight in the annexed diagram in the tree by the numerous transverse

The writer calculates that atmos pheric pressure should sustain a column of water thirty-four feet high in has only to touch the corresponding a duct whose diameter is half a millimeter, having a septu t of this size at its base. If the duct narrowed down tion of the light rays which emanate above the septum, the supported col- within the reflector. umn might be much higher, and if mixed with air, higher still-perhaps stantially a shade. It has on the outer hundreds of feet. Of the existence of air in the duct he says:

"Dr. MacDougal states that 'the cav-Strasburger describes the water as which soften the rays of light before freely streaming round the gas-bubbles or between them and the walls This arrangement of water surround ing gas-bubbles constitutes what is known as foam-not, indeed, of the rough kind, but 'dressed,' so as to be in unison with the shape of the duct through which it must pass. It would take a great many hundreds of meters of such foam to weigh a kilogram to mospheric pressure at the base proves to be sufficient for the work to be done Every change of equilibrium will cause a movement upward of the water which is the only movable ingredient of the mixture.

"If we are correct in accepting the observation that the water thus surrounds and encloses the continuous or bended air-globules (which must also have much vapor of water), not only is the streaming of the water account-Let the old pole alone. Nobody wants ed for, but also much phenomena as capillarity and diffusion, and occasional stasis, reminding one of the phenom They are going to build a twenty- ena of capillary circulation of blood; also the correlation which Strasbur- Philadelphia Record.

"The condition of low apical pres

between the state of the

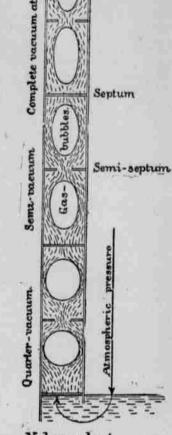
the water upward.

and the streaming within the xylendructs is explained, and possibly the pulsation of gas-bubbles which Man

Dougal regarded as belping to raise

Hydrostatic

Paradox



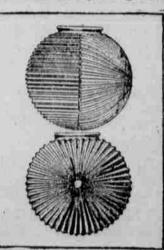
Xylem -duct (diagrammatic)

sure is secured by the activity of the leaves correlated with the structure of the ducts. The leaves are not known to actively attract the water, but they always remove it as it arrives, turning it into starch, and transpiring it in great quantity. When they die or are stripped, the ascent of water ceases."

### PRISMATIC REFLECTOR.

A New York inventor has taken the idea of the "daylight prism" as a basis and adapted it to an ordinary gas lamp having a part which acts entirely as a reflector and an opposite part which acts as a shade for directing and softening the light. About one-half of the surface of the shade is covered with reflecting prisms, constructed to direct back into the shade a large por-

The other side of the reflector is subsurface a series of prisms which direct the light in any desirable direction and at the same time soften the light rays. gas' ('Plant-Physiology,' p. 20). And shade is covered with diffusing ribs,



Directs the Rays of Light,

they reach the final directing prisms. These reflectors, or shades, are made of pressed glass and in a single piece.-

### HATPIN WITH TWO POINTS

been patented by a Maine inventor, ar

illustration of which is shown here.

This hatpin is used in conjunction with

a holder, the latter being sewed to the

sweatband or the inner edge of the hat.

This holder is in the form of a small

metal clip having two oblong openings,

through which pass the two points of a

double-pointed hatpin. The holders are

fastened to the sweatband at each side

of the head, and the pins push in

through the air to hold the hat in

place, the enlarged points of the Latpin

preventing it from failing out. The

hatpin is shaped similar to an ordi-

nary hairpin, with the exception of

the enlarged points, which are flat-tened and broadened. In connection

with the holder is a socket projecting

outward from the edge of the hat

This socket serves a unique purpose. In removing the hat from the head the

pins are pulled as far out as possible

moved the points of the pins will not project and catch in the h ir. In using the device the holder is An entirely new idea in hatpins ha

munt Miller.

Used on a Straw Hat. which brings the heads of the pins in- first sewed onto the sweathand. The in to this socket, and as the hat is re- pin is then twisted so that the flat ers.

points can be inserted into the oblong openings. This is easily done by inserting one flat point in one opening and springing the other point over to enter the other opening. After the points pass through the pin will assume its normal pos.tion; and it can then be pushed in and out without dropping out. When it is desired to remove the pln altogether, and perhaps use it on another hat, it is drawn out as far as possible and then simply twisted so that the flat points will ome through. In using such a hatpin there is also

no danger of making numbers of holes in the side of the hat, which is the case with the common hatpin.

Britain's Gas Burners.

The gas Industry in Great Britai cording to the Society of British Ge Industries, consists of 1250 gas copanies and local authorities, and piles 4,400,000 consumers. The don companies—I. e., city and subvivitin the ten miles radius—inc in the foregoing have 945,000 co