experimenter and the most successful one. It may be that Mr. Edison has taken a hand in this line of work, since he has done so in almost every line, but his name has not been publicly associated with the artificial production of diamonds. Your sources of information in the matter may be better than ours. The invention of carborundum is credited to Mr. E. G. Acheson in 1893. Moissan, "Electric silicide of carbon ever, publish anything on this subject at the discharge. With 300,000,000 oscillations the time, and the discovery of the crystallized waves are about 3 feet long, since the speed carbon silicide really belongs to Acheson." It of the waves is about the same as that of is not "diamond in character," as you state, light. The mode of securing waves of a parsince the diamond is simply crystallized car- ticular length is discussed in the several sysbon, while carborundum is a compound of silicon and carbon. It is next to the diamond in hardness, or between 9 and 10 on the mineral scale of hardness. Being harder than emery it is a better abrasive, although emery is still preferred by some.

(9745) M. H. asks: 1. What is a (9745) M. H. asks: 1. What is a satisfactory as any. A good form is described in our SUPPLEMENT No. 792, price 10 cents. A. A range finder is an instrument for determining the distance and direction of any ! object. containing valuable articles describing various kinds of range finders, at ten cents each. 2. Is it identical with a distance indicator? A. There are many forms of this instrument, some of which the moon are produced by the moon's revolution place or bay we have a two-phase or threemay be called distance indicators. 3. About how, around the earth. The sun shines upon the phase current of the tide. 2. What is meant long, or how much time is usually consumed in finding the range with such an instrument? Has any instrument yet been invented or de and the earth, the sun is shining upon the side vised which will show or tell the distance of an object in from five to fifteen seconds of time? A. We do not know how quickly an experienced person could plot the result after the observations are taken. 4. Can a wind gage be made by an amateur mechanic which will record somewhat accurately the velocity of the wind? A. The velocity of the wind is usually measured by revolving cups placed upon arms. The revolving parts actuate gears which communicate motion to hands upon a dial. A skillful face to the earth, there was a time when she amateur could copy such an instrument if he | showed half her lighted surface to the earth, had one at his disposal.

(9746) A. G. says: I think your explanation of the cause of a ball's curving in Question 9680, erroneous. You say: "The rotation of a ball is such that the air pressure your city library, you can read about it, and is greater on the side toward which the hall rotates, pushing the ball in the opposite di-Now, while without doubt the ball rection. curves in the opposite direction from its retation, I don't think you have stated the true cause of its curving. It seems to me that the greater air pressure is not due to the rotation of the ball but to its flight, hence it is always on the same side, namely the front, hence the ball must act upon it, not it upon the ball, to produce a variety of curves. In a word, the rotation of a moving ball gives it the tendency to circumvent, as it were, the resistance of the air, and so force itself more and more from its path. The only rotation that has no curvfng effect upon a ball's flight is that which has its plane parallel to the plane of the re-sistance such as is given the rifle projectile. A. We regret that you should not be able to agree with our statement of the curving of a ball, since it is not ours simply, but the conclusion of the highest authorities in mathematical physics. We would refer you to Hast-ing and Reach, "General Physics," page 135, where you will find the discussion of the subject.

difference between a foot square and a square The ocean has little influence on these storms foot? Also, is there any difference between an as far west as Ohio. The storm does not come inch square and a square inch? 'The last one from an easterly direction, but from the west, was answered in a certain paper as follows: and the wind in its whirling in the storm blows "Yes, twelve times the difference." Professors from an easterly quarter in the front, and here claim there is no difference. A. There is from a westerly guarter in the rear of the A. In all vibratory motions it is the wave no difference in area of surface between a westerly wind, as you have observed. square inch and an inch square, between a square foot and a foot square. There is a difference in meaning, however, between the two expressions, which we will illustrate. A problem can be solved, please give the solution illustrations of a transverse wave with an ontwo expressions, which we will industrate. A provide that in grant of the SCIENTIFIC illustrations of a transverse wave with an on- AND EACH BEARING THAT DATE piece of paper is an inch square when its in your inquiry column of the SCIENTIFIC ward motion of the wave form. It is not corners are all right angles and its sides are AMERICAN. You will note that no rate of ilight which moves, but a wave form. The mat [See note at end of list about copies of these patents.]

ficially, in which Moissan has been the chief is simply a difference in definition of a word. Both are right. The dictionary would give you Text books of this statement of the case. science and psychology usually contain it. 2. What is the complementary color of purple or violet? Is it green or yellow? A. The complementary color of purple is green. 3. Concerning wireless telegraphy, I have read that I did not, how- the number of oscillations per second of the tems in Mayer's "Wireless Telegraphy," price \$2. 4. Which is the best battery to use with a small induction coil (spark) for experimental purposes-one that will give a steady current and not annoy one by polarizing every few minutes? A. For experimental purposes you will find the plunging bichromate battery as

(9749) G. R. M. asks: Will you kind We can send you eleven SUPPLEMENTS ly answer the following through the columns the changes of the moon? A. The phases of moon all the time. When the moon in its motion around the earth comes between the sun of the moon which is farthest from the earth. The dark half of the moon is toward the earth. That is the time of new moon. About two weeks later the moon has traveled around so that it is farther from the sun than the earth is, and the earth is between the moon and the sun. The lighted side of the moon is toward the earth. That is full moon. As the moon has changed from showing no lighted surface to the earth to showing the entire lighted sur-That was first quarter. Similarly there will be a time between full and new moon, when she will show half her lighted surface to the earth. That is last, or third quarter. If you will look up this matter in astronomies in see the illustrations of it in the books, which will give you a much better idea than mere description in words. Ask the librarian about it. 2. Why does the mercury in the barometer stay higher when storms come from an easterly direction than it does when they come from any other direction? I have noticed this time and again and some of our largest and worst storms come from the east, and still the mercury will stay away up. I have wondered if the ocean had anything to do with it. As regards the power of a télescope, what meant when manufacturers say they magnify 20, 33, or 50 diameters, A. We were not aware that a storm coming with an easterly wind was which comes with the wind from a southerly \mid in a dirigible balloon. Storms always travel from west quarter. to east around the world. In crossing our country the paths curve considerably because of the mountain ranges, plains, and rivers. In the storm the wind blows inward toward the center, and the storm as a whole rotates from east to north, west and south, as we say, opposite to the hands of a clock in the northern hemisphere. This causes the northeast winds in (9747) M. W. S. asks: Is there any the northern front quarter of such a storm. storm as it goes away. It clears off with a

(9750) E. C. asks: If the following

a uniform rate.

(9751) A. W. asks: 1. What is meant "the receiving antenne should be about one-fourth the length of a wave." How may the "polyphase" as applied to electric engines? A length of the wave be determined? A. The and by "cycle" as applied to gas engines? A varying quantity passes, including all its values, and it fluctuates through these changes periodically. Thus a cycle of an alternating current of electricity is the successive values of the E. M. F. through one series of changes from zero to its highest value, and down through zero to the lowest and back again to This succession of values the current will have as many times per second as there are cycles, ordinarily 30, 60, or 120. Polyphase currents are those whose E. M. F.'s differ from each other by a fraction of a phase. Thus three currents a third of a cycle apart will furnish a three-phase current in the lines with which it is connected. See Sloane's "Electrician's Handy Book," price \$3.50. A cycle is like a complete succession of the heights of one tide in about twelve hours at WHEEL GEARING. With Tables of Pitchof notes and queries in your valuable paper, the seashore. A phase is any single value or and oblige a faithful reader: 1. What causes height of the water. If two or three tides come together by different channels in the same by jibing a sail-boat? A. A sailing vessel is tacked when in changing from one course on the wind to another it presents its bow to the draftsmen, and others engaged in making calwind: it is jibed when it is turned in the opposite direction so that it presents its stern to the wind. In a high wind the latter is always tables giving the pitch-line diameters, etc., a difficult and sometimes a dangerous opera- of gears of different sizes. The pitch-line tion. 3. Is a catboat so called because the mast stands straight up at one end of the boat like a cat's tail from its body? A. We are certain that a catboat is not so called because its mast stands straight up like a cat's tail. The mast is at the front end of the boat, and so far as we have observed cats have their tails set at the stern end. We do not know the derivation of the name cathoat, but think it far more likely that it was given because of the quickness with which these boats will come about. 4. Does an electric motor differ in structure from a dyname? Can they be interchanged? A. There is no theoretical difference between a dynamo and a motor. In gen- | Water Supply and Irrigation, is issued under eral, each may be used for either service. | the auspices of the United States Geological There are, however, many structural differences between the two classes of machines, so that it has to do with interior basin, Pacific, and can be easily told to which class any particu-lar machine belongs. 5. How can a steady, measurement of the flow of streams made dureffective current proceed from a dynamo giving an alternating current? The current changes polarity each instant, as understood. that will be of use in general hydrographic A. A steady current is not produced by an studies has been included. Reconnaissances of alternator. An alternating current can, however, be changed to a steady direct current by means of a rotary converter. 6. What light form of motor would you recommend for driving a dirigible balloon? A. Probably some characterized by a higher baremeter than one form of gasoline motor is best adapted for use

> (9752) O. E. G. asks: 1. Is the speed of radiant heat (whose medium is the same as light) the same as light and electricity? A. The latest science does not make any such distinction as between radiant heat, light, electricity, etc. They are all the same radiation. If the waves are of a length to affect the proper nerves we feel them as heat; if they can affect the eye we see light. 2. Is the difference between light, electricity, and radiant heat due to the difference in wave-length? A. The sole difference between the several effects is due to wave-length. See the "New Knowledge," by Prof. Duncan, price \$2. 3. If light moves in transversal waves, how can it move forward? form simply which travels. A wind moving over a field of grain is the very best illustration of this one can have remote from the ocean. Water waves on the ocean are good

The soldiers traveled 25 miles. The courier as to how to connect up the battery (bluestone) went 2.41 times as fast and traveled for the and run the wires from windows to battery same length of time, therefore he traveled and then to annunciator. A. We recommend 2.41 imes 25 miles or about 60.25 miles. This and can supply you with Lorstmann and Toussolution is based on the assumption that both | ley's "Modern Wiring Diagrams," price \$1.50, the soldiers and the couriers are traveling at which gives a good variety of modes of wiring for burglar alarms, showing all connections.

NEW BOOKS, ETC.

SUCTION GAS. By Oswald H. Haenssgen. Cincinnati: Gas Engine Publishing Company, 1905. 16mo.; pp. 88. Price, \$1.

The economy of the gas producer for furnishing fuel for a gas engine has led to its rapid introduction and adoption in this country for many large installations. That a gas producer of the suction type can be made to supply fuel gas almost as economically for a small-sized engine of 3 or 4 horse-power as for a much larger plant, will perhaps be surprising to our readers. Such a producer, however, is described in this little volume, which aise gives considerable useful information, tegether with numerous valuable figures upon suction gas.

Line Diameters of Wheels, Proportions and Strengths of Teeth, etc. By Alfred Wildgoose and Andrew J. Orr. New York: Spon & Chamber-lain, 1904. Pocket size; pp. 175. Price, \$1.

This small handbook should save engineers, culations relating to gear wheels, much valuable time. It contains a large number of diameters are given with a degree of accuracy sufficient for all ordinary purposes, the diameters being expressed in inches and decimals and fractions of an inch. The proportions of wheel teeth given are those generally adopted by engineers, and the various dimensions for each pitch will be found tabulated in a convenient form.

Report of Progress of Stream Measure FOR THE CALENDAR YEAR 1903. By John C. Hoyt. Washington: Govern-By ment Printing Office, 1904.

This book, which forms Paper No. 100 on Survey. It forms Part IV, of the series and ing the year 1903, and reported herein, a considerable amount of other special information many of the important rivers in different parts of the country have been made, and these have resulted in a collection of much valuable data with regard to flood, water-powers, river profiles, etc. The number of regular stations for stream measurements is steadily increasing, and at present systematic measurements are taken at over 500 stations, distributed so as to best cover the needs of the various States and Territories. The expansion of the work is the result of the greatly increasing demand from the general and engineering public for stream data collected by the Survey.

INDEX OF INVENTIONS For which Letters Patent of the

United States were Issued

for the Week Ending

August 22, 1905

AND EACH BEARING THAT DATE

one foot square when its sides are all equal and exactly first weak-first weak-first weak-first water square in the square or right angles. A foot square implies a square was easily and its state from the rear all square or right angles. A foot square implies a square was here he square foot or 144 square inclus (12 feet long would be such to the square foot or 144 square inclus (12 feet long would be such to the square foot or 144 square inclus (12 feet long would be such to the square foot or 144 square inclus (12 feet long would be such to the square foot or 144 square inclus (12 feet long would be such to the square foot or 144 square inclus (12 feet long would be such to the square foot or 144 square inclus (12 feet long would be such to the square foot for the asynare foot or 144 square inclus (12 feet long would be such to the square foot for the asynare foot for the square foot for the asynare foot for the course to the square foot for the asynare foot for the foot for the asynare foot for the asynare foot for the foot for the asynare foot form the asynare foot form the asyna	all one inch in length. Similarly a board is	speed of length of time is given. A column of	ter which vibrates moves to and fro, the wave		_
and exactly one foot long and its corners are all square or right angles. A foot square in the deliver an tessage at features to piles a square whose surface is one foot. On the other hand a board may be of any shape the rear, when he notices that the rear of the ohme in dwide and 12 feet long would be such a board. It might be irregular in shape and contain a square foot. The answer you quot a board of the column vas when he started then be a square foot. The answer you quot then be a square foot. The answer you quot a board. It might be irregular in shape and entain without having the time known. The shale of sufface. It would then be a square foot. The answer you quot the a square foot. The answer you quot then be a square foot. The answer you quot the as follows: Let $Y =$ the number of miles fraveled per hour by the solicies. Then $\frac{25}{Y-X}$ the solicies is the sensition with the number of that sensition with the mile prosee that first is the sensition with the mile prosee the fail of a tree would not protone present the f	one foot square when its sides are all equal	soldiers twenty-five miles long are on the	advances. 4. Please explain wave-length. A.	Air ship W C Press	
all square or right angles. A foot square in pleas a square whose surface is one foot. The other hand a board may be of any shape the other hand a board for the other hand be and be the state the fall of a tree would not produce the hand be called to the fall of a tree would not produce the sal	and exactly one foot long and its corners are	march. A courier is dispatched from the rear	Wave-length is the distance from a particle	Amalgamator, E. S. Moss	798,007
$\begin{array}{llllllllllllllllllllllllllllllllllll$	all square or right angles A foot square in	to deliver a message at the head of the col-	moving in a contain direction to the next particle	Ammonia, making, K. Kaiser797,961.	797.962
pines a square whose surface is one foot. On the other hand a board may be of any shape whatever and be a square foot, if its area is beed of the column was when he started. Top on the crest, for example, to the next sage building means J. G. Dolle. Top exactly on the crest, for example, to the next sage building means J. G. Dolle. Top exactly on the crest, for example, to the next sage building. Top on the crest, for example, to the next sage building means J. G. Dolle. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest, for example, to the next sage building. Top exactly on the crest sages. Top exactly on the crest sages. Top exactly on the crest starte the same short as these while the same short as these while the same short as the next sage building. Top exactly on the crest starte than the same short as the next sage building the same short as the same short as the next sage building the same same same same same same same sam	all square of right angles. A foot square im-	umn. He delivers the message and returns to	moving in a certain direction to the next parti-	Antiseptic compound, A. M. Clover	798,01 3
the other hand a board may be of any shape whatever and be a square foot if its area is one inch wide and 12 feet long would be such one inch wide and 12 feet long would be such contain a square foot of surface. It would from a paper is not correct. (9743) A. W. P writes: 1. What is a noise? Is it simply the vibrations caused by a moving object, or is it the action of the vib ations on the ear full. Would there are not strated, a moving object, or is it the action of the vib ations on the ear full. Would there are not strated, A. The work of mark is an area in a single wire as an area in a real are very is atoliced in the solution scales by a moving object, or is it the action of the vib atolice of the form and $\frac{25}{Y-X}$ the the form $\frac{25}{Y-X}$ the form $\frac{25}{Y-X}$ the sensation. If there would not form any sensation. If there would not produce any sensation. If there would not produce any sensation. If there would not produce that sensation. If there would not produce any sensation. If there would not produce any sensation. If there were no persent present the fail of a tree would not produce any sensation. If there were no persent present the fail of a tree would not produce any sensation. If there were no persent present the fail of a tree would not produce any sensation. If there were no persent present the fail of a tree would not produce the sensation. If there were no persent present the fail of a tree would not produce any sensation. If there were no persent present the fail of a tree would not produce the sensation. If there were no persent present the fail of a tree would not produce the sensation. If there were no persent present the fail of a tree would not produce the sensation. If there were no persent present the fail of a tree would not produce the sensation. If there were no persent present the fail of a tree would not produce the sensation. If there were no persent present the fail of a tree would not produce the produce the same shock upon the arit. The the fail were for one were prese	plies a square whose surface is one foot. On	the rear when he notices that the rear of the	cle in exactly the same condition of motion.	Assay-furnace, A. M. MacDuffee	797,901
whatever and be a square foot, if its area is bead of the column was when he started. Top exactly on the crest, for example, to the next maps foot eright square inches. A strip head of the column was when he started. Top exactly on the crest, also. 5. What is a board. It might be irregular in shoe and the column was when he started. Top exactly on the crest, also. 5. What is a square foot of surface. It would then be a square foot of either the solidiers or couriers given of either the solidiers or couriers given of the any ersent is not correct. (9748) A. W. P. writes: 1. What is a noise? Is it simply the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the ford, and $\frac{25}{V-X}$ the solidiers. Then $\frac{25}{V-X}$ the the required for the ford, and $\frac{25}{V-X}$ the solidiers. The sum of the two above for any sensation in any one's mind. It would, however, produce light is the sensation if ally one's mark solidiers or the solidiers or t	the other hand a board may be of any shape	column is at the same point at which the	In a water wave, the wave-length is from a	Axle lubricating means, J. G. Dole	797.564
one square foot • 144 square inches. A strip one inch wide and 12 feet long would be such a board. It might be irregular in shape and contain a square foot of sourface. It would then be a square foot of sourface. It would the sole is sole of solution without having the time known. The solution is as follows: Let $Y =$ the number of miles traveled per hour by the courier. Let (9748) A. W. P. writes: 1. What is a noise? Is it simply the vibrations caused by a moving object, or is it the action of the yease data a tree in the woods fell with no one near to hear it. Would there be a noise? Psychologist teachers claim there would not. A. The word "noise" is used in two senses: in one sense it is the sensation which the moto perceives, in the other it is the physical cause of that sensation. If there were no present present the fall of a tree would not produe and if were for the courier to reach the frant, and $\frac{25}{Y-X-X+X-X}$ as if some one were present to hear it. The solves the fall of a tree would not produe as if some one were present on hear it. The solves the fall of a tree would not produe the bar it to the foll of the out of the would solves the wire for burgtar alarms, close clift $\frac{25}{Y-X-X+X-X}$ as if some one were present to hear it. The solves te wire for burgtar alarms, close clift the nove for burgtar alarms, clo	whatever and be a square foot, if its area is	bad of the solution man maker he started	drop on the crest, for example, to the next	Bag holder, A. Deuel	798,019
one inch wide and 12 feet long would be such a board. It might be irregular in shape and sible of solution without having the time known. The solution a square foot of surface. It would then be a square foot of surface. It would then be a square foot of surface. It would then be a square foot of surface. It would the addition is as follows: Let $Y =$ the number of miles traveled per hour by the courier. Let (9748) A. W. P. writes: 1. What is a tacted or of the solutions of the ard time solution of the solution with the value of the two solution with the solution is as follows: Let $Y =$ the number of miles traveled per hour by the courier. Let $Y = X$ and without having the time known. The solution is as follows: Let $Y =$ the number of miles traveled per hour by the courier. Let $Y = X$ affects the wave-length of electricity down to very solutions caused by a moving object, or is it the action of the volut here would not. A. The word "noise" is used in two senses: in one sense it is the sensation with the mind perceives, in the other it is the physical cause of that sensation. If there word no prosume any one's mind. It would, how were, preduce the same shock upon the air $X = X + X$ and with that $X =$ the file reaction is and without having the time required for the solutions of the are would not produce the same shock upon the air $X = X + X$ and the solution $Y + X$ and the current $Y + X$ and the current $Y + X$ and files the wave-length $X = X + X + X$ as if some one were present to hear it. The solution the solution is any one's mind. It would, how were present to hear it. The solution is as follows and the files of the solution is as follows a sy there was a sound. Solving this equation we find that X equals the time required for the basile con-restophable, J. Manchester 177,6760 to 177,750 t	one square foot or 144 square inches. A strip	head of the column was when he started.	drop exactly on the crest, also. 5. What is	Bagasse-burning furnace, H. G. Ginaca	797,805
a board. It might be irregular in shape and contain a square foot of solution without having the rate of contain a square foot of each the soldiers or couriers given by the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is it the action of the vibrations caused by a moving object, or is the action of the vibrations caused by a moving object, or is the action of the vibrations caused by the vibrations caused by the vibrations caused by the vibrations of the vibrations of the vibrations of the vibrations caused by the vibrations of	one inch wide and 12 feet long would be such	How far and he ride? A. The problem is pos-	the wave-length of electricity, and does it vary	Lale", hay, G. M. & M. J. Johnson	797,730
contain a square foot of surface. It would then be a square foot of surface. It would the not. It would the sufficit the wave a square foot of surface. It would the not.	a board. It might be irregular in shape and	sible of solution without having the rate of	with the amperage? A. There are all sorts	Babes, changing the shape of and compress-	
then be a square foot. The answer you quote from a paper is not correct. (9748) A. W. P. writes: 1. What is a noise? 15 it simply the vibrations caused by a moving \bullet jetc, or is it the action of the vib attions on the ear drum? For instance, sup- pose that a tree in the wools fell with no one near to hear it. Would there be a noise? Psychology teachers claim there would not A. The word "noise" is used in two senses: in one sense it is the sensation. If there were no person of that sensation. If there were no person is fisher and you having the time required for the solution is as follows: Let $Y =$ the number of miles traveled per hour by a moving \bullet jetc, or is it the action of the vib attions on the ear drum? For instance, sup- pose that a tree in the wools fell with no one near to hear it. Would there be a noise? Psychology teachers claim there would not perceives, in the other it is the physical cause of that sensation. If there were no person as if some one were present to hear it. the full of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the aris as if some one were present to hear it. the full of a tree would not produce as if some one were present to hear it. the full of a tree would not produce as if some one were present to hear it. the full of a tree would not produce as if some one were present to hear it. the has in any one's mind. It would, however, produce the same shock upon the aris as if some one were present to hear it. the has is follows any there was a sound. the the has a to for the two as a sound. Solving this equation we find that X equals 2.41. Y - X Y + X X howe hen hot. 25 = 25 = 25 = 25 = 25 = 25 = 25 = 25 =	contain a square foot of surface. It would	speed of either the soldiers or couriers given	of wave-lengths of electricity down to very	ling, S. J. Webb.	797,997
The analysis is not correct. (9748) A. W. P. writes: 1. What is a noise? Is it simply the vibrations caused by a noise? Is it simply the vibrations of the advance of the postential at ree in the woods fell with no one near to hear it. Would there be a noise? is used in two senses: in one sense it is the sensation which the mind perceives, in the other it is the physical cause of that sensation. If there were no person is siders to march 25 25 25 25 as if some one were present to hear it. The present the fall of a tree would not produce any sensation in any one's mind. It would, howevere, produce the same shock upon the air as if some one were present to hear it. The present the fall of a tree would not produce as if some one were present to hear it. The present the fall of a tree would not produce as if some one were present to hear it. The present the fall of a tree would not produce as if some one were present to hear it. The produce taken the fall of a tree would not produce as if some one were present to hear it. The produce taken for the as as nooned. Solving this equation we find that X equals 241. $\frac{25}{Y-X+X-X-X}$ A solving this equation we find that X equals 241. $\frac{25}{Y-X+X-X-X}$ A solving this equation we find that X equals 241. $\frac{25}{Y-X+X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-X-$	then he a square foot The answer you quote	and without having the time known. The	short waves, but not so short as those which	Barge, pressed steel, J. S. Martin	797,804 797 9 6 9
$\begin{array}{l ll l l l l l l l l l l l l l l l l l$	from a payor is not compat	solution is as follows: Let $Y =$ the number of	produce light These used in wireless teleg	Barrel-making machine, R. L. Cummings	797.666
(9748) A. W. P. writes: 1. What is a noise? Is it simply the vibrations caused by a moving object, or is it the action of the vib ations on the ear drum? For instance, sup- vib ations of the ear analytic the earlies of storage. T. A. Belisen	from a paper is not correct.	miles traveled per hour by the courier. Let	northy with a single wine of an acriel and more	Barrel, ventilated, G. H. Brown	797,552
a noise? Is it simply the vibrations caused by a moving \bullet ject, or is it the action of the vib ations on the ear drum? For instance, sup- pose that a tree in the wools fell with no one near to hear it. Would there be a noise? Psychology teachers claim there would not. A. The word "noise" is used in two senses: in one sense it is the sensation which the mind perceives, in the other it is the physical cause of that sensation. If there were no person present the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the arit. The si f some one were present to hear it. The psychologist would say there was no sound. Solving this equation we find that X equals the physicist would say there was no sound. Solving the enviroit to reach the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the arit. The psychologist would say there was no sound. Solving the enviroit to reach the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the arit. The psychologist would say there was no sound. Solving the enviroit to reach the fall of a tree sound to the full south as the full of a tree sound to the full south for the sound the full south for the sound south fore was no sound. Solving the physical would say there was no sound, the other it the character for the sound south fore was no sound. The physical would say there was no sound, the other it the physical sound the full south fore was a sound. It to other the full south for the sound south fore was a sound. It to other the full south fore was a sound. It to other the full south fore was a	(9748) A. W. P. writes: 1. What is	X = the number of miles traveled per hour by	raphy with a single wire as an aerial are very	Ratteries, sheet metal for nerforsted neek-	797,829
a moving \bullet ject, or is it the action of the basis of the soldiers. Then $\frac{2.3}{Y-X}$ = the time required for the courier to reach the front, and $\frac{2.5}{Y+X}$ = the time required for the sensation. If there were no person of that sensation in any one's mind. It would, however, produce the same shock upon the air as if some one were present to hear it. The sum of the time required for the courier to reach the front, $25 = 25 = 25 = 25$. The sense to the full of a tree would not produce as if some one were present to hear it. The sum of the time required for the courier to reach the front, $25 = 25 = 25 = 25$. The sense to hear it. The sum of the time required for the soldiers to march 25 miles; therefore, as if some one were present to hear it. The sum of the time required for the courier to reach the fill of a tree would not produce as if some one were present to hear it. The produce the same shock upon the air to the true to the true to the true to the true to the same shock upon the air to the true to the true to the same shock upon the air to the true to the same shock upon the air to the true to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same shock upon the air to the true to the same s	a noise? Is it simply the vibrations caused by	95	closely four times as long as the height of	ets of storage, T. A. Edison	797,845
vib ations on the ear drum? For instance, suppose that a tree in the woods fell with no one pose that a tree in the woods fell with no one near to hear it. Would there be a noise? Psychology teachers claim there would not. A. The word "noise" is used in two senses: in one sense it is the sensation which the mind perceives, in the other it is the physical cause of that sensation. If there were no person present the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the air as if some one were present to hear it. The psychologist would say there was a sound. Solving this equation we find that X equals $\frac{25}{25} \frac{25}{25} \frac{25}{25}$	a moving object, or is it the action of the	the coldinar (Then the time service)	aerial wire from which they are radiated into	Bearing, ball, R. N. Schalkenbach	798,049
$\begin{array}{c} Y - X \\ pose that a tree in the woods fell with no one near to hear it. Would there be a noise? Psychology teachers claim there would not. A. The word "noise" is used in two senses: in one sense it is the sensation which the mind one sense it is the sensation which the mind perceives, in the other it is the physical cause of that sensation. If there were no person present the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the air as if some one were present to hear it. The the \frac{25}{V - X Y + X} = \frac{25}{V - X Y + X} =$	vib ations on the ear drum? For instance, sup-	the solutions. Then $\underline{\qquad}$ the time required	space. When a capacity is in the circuit this	Belt. waist. H. J. Gaisman	797,600
pose that a first in the word	nose that a tree in the woods fell with ne one	I-A	affects the wave-length. The wave-length va-	Bias gage, adjusted, W. C. Fay	797,799
The art to hear it. Would there be a holse it is here would not. A. The word "noise" is used in two senses : in one sense it is the sensation which the mind perceives, in the other it is the physical cause of that sensation. If there were no person present the fall of a tree would not produce the same shock upon the air as if some one were present to hear it. The produce the same shock upon the air as if some one were present to hear it. The physicist would say there was a sound. Solving this equation we find that X equals $14 + 0.41 \times 0.41$	pose that a tree in the woods fell with he one	25	ries with the rapidity of the oscillations of	Binder, temporary, C. E. White	797,879
A. The word "noise" is used in three would not. A. The word "noise" is used in two senses: in one sense it is the sensation which the mind perceives, In the other it is the physical cause of that sensation. If there were no person present the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the air as if some one were present to hear it. The psychologist would say there was no sound, Solving this equation we find that X equals Y + X y + X x y + X y + X y + X x y + X y + X x y + X y + X x y + X x x y + X x y + X x x y + X x x y + X x x y + X x y + X x x y + X x x y + X x x y + X x y + X x y + X x y + X x y + X x y + X x y + X x x y + X x x y + X x y + X x x y + X x y + X x x y + X x x x y + X x x x x x x x x	Bushelery technical slaim there would not	to reach the front, and $ =$ the time re-	the discharge. 6. Does a heated conductor of	Binder, temporary, T. R. Eddy Block. See Cattle guard block.	798,022
A. The Word "noise" is used in two senses: in one sense it is the sensation which the mind perceives, in the other it is the physical cause of that sensation. If there were no person present the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the air psychologist would say there was no sound, solving this equals that T equals 241. A. The Word "noise" is used in two senses: in one sense it is the sensation which the mind perceives, in the other it is the physical cause of that sensation. If there were no person present the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the air psychologist would say there was no sound, be physicist would say there was a sound. It 0.41 Y or Y equals 241. 0.11×0.41 Y or Y equals 241. 0.12×0.41 Y or Y eq	r sychology teachers claim there would not.	Y + X	electricity retard the current? A. A hot metal	Blowpipe, C. Bauer	797,933
one sense it is the sensation which the mind column again. The sum of the two above perceives, in the other it is the physical cause of that sensation. If there were no person present the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the air as if some one were present to hear it. The solution to the two fall of the two fall the two fall of the two fall the two fall the two f	A. The word "noise" is used in two senses; in	quired for the courier to reach the rear of the	has more resistance than it has at a lower	Bobbins, making moisture repellent, C. E.	
preserves, in the other it is the physical cause of that sensation. If there were no person present the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the air as if some one were present to hear it. The psychologist would say there was no sound, Solving this equation we find that X equals the physicist would say there was a sound. It 0.41 X or X equals 241 . 0.111112325 0.11112325 $0.11123250.1112350$	one sense it is the sensation which the mind	column again The sum of the two above	temperature, and so reduces the current which	Rutting	191,102
of that sensation. If there were no person present the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the air si some one were present to hear it. The psychologist would say there was no sound, the physicist would say there as a sound. $It \neq 0.41$ Y or Y equals 241. It = 0.41 Y o	perceives, in the other it is the physical cause	quantities equals the time required for the	flows through it. Carbon, however, has a much	Boiler, S. Otis	797,601
present the fall of a tree would not produce any sensation in any one's mind. It would, however, produce the same shock upon the air as if some one were present to hear it. The psychologist would say there was no sound, Solving this equation we find that X equals the physicist would say there was a sound. It 0.41 Y or Y equals 2.41.	of that sensation. If there were no person	seldiors to march 25 miles; therefore	greater electrical resistance when cold than	Boiler tube cleaner, H. F. Weinland	797,649
any sensation in any one's mind. It would, however, produce the same shock upon the air as if some one were present to hear it. The psychologist would say there was no sound, Solving this equation we find that X equals the physicist would say there was a sound. It 0.41 X or X equals 2.41. Z = 25 - 25 - 25 (9753) F. W. M. says: I have ahouse to wire for burglar alarms, closed-cir-cuit system. Kindly tell me where I can get aBottle, non-retillable, M. T. Verals, 2.41. $Solving this equals 2.41Solving this equals 2.41.$	present the fall of a tree would not produce	soluters to march 25 miles, therefore,	when hot	Book -lear holder, F. G. Powers	797,978
however, produce the same shock upon the air $Y - X Y + X X$ as if some one were present to hear it. The $Y - X Y + X X$ psychologist would say there was no sound, Solving this equation we find that X equals 241. (9753) F. W. M. says: I have a Bottle filling device, H. G. Roth797,750 to 797.052 house to wire for burglar alarms, closed-cir- cuit system. Kindly tell me where I can get a Bottle, non-refillable, M. T. Yor X equals 241. (9753) F. W. M. says: I have a Bottle filling device, H. G. Roth797,750 to 797.052 Bottle, non-refillable, M. T. Yor X equals 241. (9753) F. W. M. says: I have a Bottle filling device, H. G. Roth797,750 to 797.052 Bottle, non-refillable, M. T. Yor X equals 241.	any sensation in any one's mind. It would,	25 25 25	when hot,	Bottle cleaning machine, L. C. Sears	797,782
as if some one were present to hear it. The $Y - XY + X$ X psychologist would say there was no sound, Solving this equation we find that X equals the physicist would say there was a sound. It 0.41 X or X equals 2.41.	however, produce the same shock upon the air		(9753) F. W. M. says: I have a	Bottle filling device, H. G. Roth. 797,750 to	797,754
psychologist would say there was no sound, Solving this equation we find that X equals cuit system. Kindly tell me where I can get a Bottle, non-restinable, M. T. Wright 797, 633 the physicist would say there was a sound. It 0.41 Y or Y equals 2.41.	as if some one were present to hear it. The	Y - X Y + X X	house to wire for burglar alarms, closed-cir-	Bottle, non-refillable, P. Grouemever	797.682
the physicist would say there was a sound. It 0.41 Y or Y equals 2.41.	psychologist would say there was no sound,	Solving this equation we find that X equals	cuit system. Kindly tell me where I can get a	Bottle, non-refillable, M. T. Wright	797.831
	the physicist would say there was a sound. It	0.41 Y or Y equals 2.41.	cheap book or instruction paper on the subject.	Bottle, non-restoppance, J. J. Manchester Bottle wrapping machine. A. Forbes	797,698