



## REPLANTING AND TRANSPLANTING TEETH.

Dr. G. R. Thomas, of Detroit, in the current number of the *Dental Cosmos*, states that this operation of "replanting" has become so common with him, and the results so uniformly satisfactory, that he does not hesitate to perform it on any tooth in the mouth, if the case demands it; and he finds the cases that demand it and the number that he operates upon continually multiplying.

He makes it a point to examine the end of the roots of nearly all his cases of abscessed teeth; and a record of more than 150 cases, with but one loss (and that in the mouth of a man so timid that he utterly refused to bear the pain which nearly always follows for a few minutes, therefore necessitating two extractions), convinces him that the operation is not only practical, but decidedly beneficial both to patient and operator. For one sitting is all that he has ever really found necessary to the full and complete restoration of the case.

In the present article, however, Dr. Thomas states that it is his object no so much to speak of replanting as of transplanting, which he has reason to believe is just as practical, so far as mere re-attachment is concerned, as is replanting. He details, in illustration, a case in which he successfully performed the operation; inserting in the mouth of a gentleman, who had lost a right superior cuspidate, a solid and healthy tooth that he had removed from a lady's mouth four weeks previously. He opened into the canal and pulp chamber of the tooth, from the apex of the root only; cut the end off one-eighth of an inch (it being that much too long), reduced the size somewhat in the centre of the root (it being a trifle larger than the root extracted), filled and placed it in position. He states that the occlusion, shape and color were perfect, so much so that several dentists who saw the case were not able to distinguish the transplanted tooth from the others. The two features in the case that he calls particular attention to are: First, that although the tooth had been in his office four weeks, there is to-day no perceptible change in color; and, second, that the re-attachment is as perfect as though it had been transplanted or replanted the same day of extraction. The operation was performed about three months ago. Dr. Thomas knows of but two obstacles in the way of that perfect practicability of "transplanting." First, the difficulty of obtaining the proper teeth at the proper time; and, second, the possibility of inoculation. The latter is the more formidable of the two, and, to escape the ills that might follow, the greatest caution is necessary. The first difficulty is more easily gotten over, for it is not necessary that the tooth transplanted should correspond exactly in shape and size to the one extracted; if it is too large, it may be carefully reduced; or if too small, new osseous deposit will supply the deficiency. Neither is it necessary, as we have seen, that the transplanted tooth should be a freshly extracted one. —*Methodist*.

**ANOTHER CITY TO BE HEATED BY STEAM.**—The Springfield Gas Company has bought the right for this city to use the Holly system of running steam pipes through the streets to furnish heat and power for adjoining buildings, and the city government will be asked to permit the construction of an experimental line this winter from the company's works on Water street through Elm to Main street. This short line will reach a number of dwellings, stores and offices, a large schoolhouse, the county court house, and the First Church and chapel, in which, with the exception perhaps of the church, it is hoped that a trial of the system may be made, the most distant point from the works being Chicopee bank. It is no new thing of course to heat more than one building by steam from a single furnace, this already being done in this city in the armory buildings and in the Boston and Albany building and depot. The Holly system, which is owned at Lockport, N. Y., and is in most successful operation in that city, includes numerous improvements in the protection of the pipes laid in the streets, the arrangement of connections, valves, traps, etc. In the works at Lockport steam is conducted two miles, and Mr. Holly claims that a distance of five miles can be reached. The pressure on the pipes in the streets is about fifty pounds, and in the house about ten pounds, although only one or two pounds is needed for heating. The Lockport company began on the basis of charging for the heat about as much as had been before paid for fuel, but introduced meters as soon as the enterprise was fairly established, and a similar course will doubtless be pursued in this city. The amount that can be saved to

consumers by this system is evidently large, since there is inevitably a waste of fuel in connection with every fire and a great deal of dust and dirt that are injurious to furniture and health. Some of the Lockport housekeepers told visitors from this city that they hardly considered it necessary to clean house in the spring, while their houses had been heated throughout so thoroughly that they scarcely knew of the changes of temperature out doors. The steam is also used for cooking, and is equal to almost any culinary operation except frying and broiling. Experiments have also been made in clearing sidewalks of snow by the use of steam, and the cost of melting a ton of snow is found to be but five cents.—*Springfield (Mass.) Republican*.

**LIGHTNING RODS.**—During the summer, when thunder-storms are most common, special attention should be paid, particularly in exposed situations in country places, to the condition of the lightning-rods. The main stem of a copper lightning conductor should never be less than four-tenths of an inch in diameter; this dimension is not sufficient for a building more than eighty feet high. Galvanized iron may be used instead of copper, but then the diameter should be, at least, double that of a copper rod. A galvanized iron-rod conductor should never be less than eight-tenths of an inch in diameter; a galvanized iron strip should be four inches wide and one-eighth of an inch thick. A lightning-rod must be continuous and unbroken from end to end. A rod need not be attached to a building by insulated fastenings; metal clamps may be safely employed, provided the rod be of good conducting capacity and otherwise efficient. Above, the rod must terminate in metal points, well projected into the air; there should be several of these points, and all perfectly sharp. The bottom of the conductor must be carried down into the moist earth and be connected with it by a surface contact of large extent. All large masses of metal in a building should be metallically connected with the lightning-rod, except when they are liable to be occupied by people during a thunder-storm—an iron balcony, for instance. In such cases it is better not to have the iron connected with the conductor, for there is some risk of persons standing on the balcony furnishing a path for the lightning to the rod. The rods ought to be tested every year to make sure that the continuity is perfect and the ground connection satisfactory.—*N. Y. Witness*.

*Galignani's Messenger* says: A very curious discovery has just been made, which, if it should be found as practicable in application as it seems to promise, may create a very considerable change in the production of silk. It is nothing more or less than the possibility of obtaining two yields in the year of the raw material, instead of one, as at present. The moth, which is the last stage of the caterpillar's existence, lays its eggs in May or June, and they remain in a dormant state until the spring of the following year. But sometimes they are observed to hatch spontaneously ten or twelve days after they are laid. That circumstance having come to the knowledge of M. Duclaux, Professor of the Faculty of Sciences, at Lyons, he undertook a series of experiments on the subject, and has found that the new hatching, or forcing, can be procured at will. The means for effecting that object are very simple: Rubbing the eggs with a hard brush, subjecting them to the action of electricity, or more surely still by dipping them for half a minute in concentrated sulphuric acid. When this new hatching is accomplished, the mulberry-tree is in its full vigor, and the weather is so favorable that the rearing of the worm is liable to much less risk than during the early day of spring, when the sudden atmospheric changes are very detrimental and frequently fatal to the growing caterpillars. Moreover, the eggs from the second batch are said to produce the following year a progeny much more hardy than that arising from those which have been, so to say, hibernating for so many months.

**DISINFECTING FOUL PLACES.**—The *Scientific News* calls attention to the importance at this season of getting rid of all vile smells about dwellings, and makes this practical suggestion: "The article commonly used to disinfect foul places is chloride of lime, but in reality it is not of much value. It may and generally does remove bad smells, but the cause still remains, as the chloride simply destroys the gaseous emanations. The much advertised disinfectants are usually catchpenny nostrums, and unworthy of notice. One of the very best known disinfectants is old-fashioned 'copperas,' or sulphate of iron, which can be had very cheap. A barrel of copperas would weigh probably 300 pounds, and can be purchased at wholesale price for a cent and a half per pound. And every family ought, especially in warm weather, to have a supply on hand. A couple of handfuls of copperas thrown into a bucket of water will soon dissolve, and it can then be used freely, and is a valuable disinfectant. The best plan is to fill a half-barrel or keg with water, and suspend within it a

moderate sized basketful of copperas. In this way it dissolves more rapidly than when thrown to the bottom of the wooden vessel, and thus a supply is always at hand ready for use.—*Christian Intelligencer*.

**DEATH FROM ETHER.**—A patient dies suddenly, not because chloroform or ether has too quickly entered into and thus poisoned the body, but because its entrance has been prevented by its pungent or irritant property, which has restrained the necessary respiratory movements at the same time. If this be true, the condition of safety is to administer either zarcotic in that degree of dilution at which it is easily breathed; and, when unconsciousness is thus gradually produced, it may then be given almost at the point of saturation, for, as sense or consciousness is gradually lost, the breathing is no longer restrained by that pungency which was a source of danger in the first instance,—though this last point is of comparatively little moment—the air will still contain sufficient oxygen to satisfy the chemical requirements of respiration. Some have thought that ether may be given with more safety than chloroform, and appeal to experience as being in their favor; but this is erroneous, and it has been clearly shown that there is in reality no difference. Both are equally free from or obnoxious to danger, in accordance with obedience to or neglect of the precaution I have indicated.—*Boston Journal of Chemistry*.

**SCIENTIFIC AND INDUSTRIAL.—COMPRESSED COFFEE.**—A patent has recently been issued in Germany, says the *Deutsche Industrie Zeitung*, for a process of compressing ground and burnt coffee, for the purpose of making it more readily transportable and unalterable for a length of time. For this purpose the coffee is subjected to a pressure of from 40 to 70 atmospheres in suitable cast-iron moulds. The coffee is thus made into cakes, and comes into the market in a form resembling chocolate, divided as the latter is by ribs to facilitate breaking into pieces of suitable size for use. The interior surface of the moulds is highly polished, by which artifice the outer crust of the compressed coffee is made sufficiently smooth and hard to prevent the tendency of the ethereal oil of the coffee to escape from the interior of the cakes. The volume of the coffee thus prepared is reduced to less than one-third of that of the original. It is asserted that the operation does not in the least affect its good qualities, and that it can be packed and transported in tin foil or other packages, preserving its aroma indefinitely.—*Christian Intelligencer*.

Mr. HENRY E. KNAPP, civil engineer, of New-York, has recently attacked the theory of ventilating sewers and drains. He asserts that the sewer gases are heavier than air, and would remain near the surface of the ground if set free, and therefore it would be just as sensible to ventilate graves. He contends that the only safe way to deal with the sewers is to give them plenty of water, and see that proper valves are used. In commenting upon Mr. Knapp's views, *The Manufacturer and Builder* says: "We have always been in favor of keeping the sewer gases where they belong—in the sewers. Experience has taught us that ventilating openings, even when led up to the roof, often spread disgusting and pernicious odors around the place of their exit. To ventilate them in the street or sidewalks in front of the residences, as recommended by some, who even have patented contrivances for this purpose, we most emphatically condemn, especially when the water supply is sufficient to dilute and wash the contents to the sea; surely in that case there is not the least necessity for it."—*Christian Intelligencer*.

A TERRIBLE death from phosphorus is reported. A young man left Paris a few days back to visit his friends at Lyons, and as soon as he got into the carriage he lit a match by scratching it with his thumb-nail, and a piece of the incandescent phosphorus penetrated under the nail and made a slight burn, to which he paid no attention. But after an hour the pain became very great, the thumb swelled, then the hand, and next the forearm. He was obliged to alight at the first station and send for a medical man, who declared that instant amputation of the arm was necessary. The patient insisted on postponing the operation for a few hours until the arrival of his father for whom he had telegraphed. But before the latter could reach the spot it was too late; the poisonous matter had gained the arm, then the shoulder, and any operation was henceforth impossible. The young man died 27 hours after the burn in horrible suffering.—*Alliance News*.

THE new electric light which they are now introducing into Paris, and which has the advantages of greater brilliancy and cheapness, has beside the sanitary advantage of being better for the eyes and more like sunlight, the further advantage of avoiding all the evils of leaking gas and the production of carbonic acid, or even of the overheating of close apartments. A kerosene flame produces as much impurity in the air as comes from the lungs of

a stout man, and kerosene is responsible for two hundred deaths a year in the United States from explosions. We trust the system will soon be introduced here.—*N. Y. Independent*.

## DOMESTIC.

**APPLE BUTTER PUDDING.**—Peel and take out the cores from six good-sized apples, fill with sugar; put into a pie dish and cover with a light batter. Bake one hour in a moderate oven.

**GLAZED HAM.**—Brush the ham—a cold boiled one, from which the skin has been taken—well, all over with a beaten egg. To a cup of powdered cracker, allow enough rich milk or cream to make into a thick paste, salt, and work in a teaspoonful of melted butter. Spread this evenly a quarter of an inch thick over the ham, and set to brown in a moderate oven.

**MUTTON OR LAMB RECHAUFFE.**—Cut some slices of cold undertone mutton or lamb; put them in a frying-pan with enough gravy or broth to cover them. Or, if you have neither of them, make a gravy of butter, warm water and catsup. Heat to boiling, and stir in pepper and a great spoonful of currant jelly. Send to the table in a chafing-dish, with the gravy poured about the salad.

**MRS. HOBBS' CHICKEN SALAD.**—Three chickens chopped fine, both light and dark meat; the juice of two lemons; eight or ten eggs boiled hard—the whites, chopped fine, and the yolks mashed fine, moistened with six teaspoon melted butter, two of sweet oil; to which add one teaspoon of mustard, one of pepper, one of salt, one of sugar, three of cream; and last, add six large bunches of celery, chopped fine, with sufficient vinegar to moisten the whole.—*Home Cook Book*.

**GREEN CORN PUDDING.**—Take half a dozen ears of green sweet corn, and with a sharp pointed knife, split each row of kernels and scrape from the ear; mix with this pulp two eggs, well beaten, two tablespoonfuls of sugar, one tablespoonful of butter, and salt spoonful of salt, half a pint of cream (or milk, with an extra spoonful of butter), and one dozen crackers, pounded fine. Mix well together and bake two or three hours. Use the corn raw.—*Western Rural*.

**BEEF CAKES.**—Take some cold roast beef; that which is underdone is best, and mince it very fine; mix with it grated bread crumbs and a little chopped onion and parsley; season it with pepper and salt, and moisten it with some beef dripping and walnut sauce; some scraped cold tongue or grated ham will be found an improvement; form it into broad, flat cakes, and spread a layer of mashed potatoes thinly on the top and bottom of each; lay a small bit of butter on the top of every cake; place them in a dish, and set them in an oven to brown.

**OKRA SOUP.**—Put a gallon of water on the fire; let it boil; cut into it two double handfuls of tender okra. Half an hour afterward put in a handful of Lima beans, three cymplings, and a bit of fresh meat, or a fowl, which is better than any thing except beef or veal. About an hour afterward put in five large tomatoes cut into slices, or more, if you choose; also add a little butter rolled in flour, but not enough to thicken the soup. Add sparingly red pepper and salt. It is better to make okra soup in a stone vessel, if convenient, and stir with a wooden spoon, as metal turns it black. Put it on very early, that it may only simmer over the fire.

**A USEFUL PASTE.**—A lady correspondent of the *New York Evening Post* gives the following recipe for a paste for use in making scrap-books and other domestic purposes:—"I dissolve a piece of alum the size of a walnut in a pint of boiling water; to this I add a couple of tablespoonfuls of flour, made smooth in a little cold water and a few drops of oil of cloves, letting the whole come to a boil. This paste will keep for months. I put it up in glass jars used for canning, or well-cleaned blacking bottles, according as I may require it. If a jar loses its top, by breakage or wear, I use it for paste, laying a bit of board over the top, if I have nothing better, for the purpose of excluding the air. I use for a brush a half-inch bristle brush, which costs but a few pennies, but is very handy to a housewife in labeling bottles, pasting a bit here and there, cleaning bottles, dusting corners of pictures, mouldings on furniture, etc. This paste is handy, too for domestic purposes. My children have many toys that come in wooden boxes, which seem necessary to keep them in order; but these will break at the corners, and soon come to pieces. As soon as a box begins to give out, I take a piece of cambric or calico, and with the above-described brush and paste cover the box so that it will bear constant usage for months. Then if the cover gives out, I pull it off and put on another one. Again, a doll's arm or leg will come off; but a piece of muslin and a bit of paste restores the article, so that it is as good as it was before."