

MEDICAL NOTES.
[New York Medical Journal.]

New Remedy for Burns.

There has been in hospital for many months a case of extensive burn, in which different applications have been tried. Every new dressing succeeded well for a time, but soon it ceased to prove of advantage. The last agent that has been used, and is used at present, is salicylic acid. The effect is more beneficial than that obtained by any of the former remedies. The method of using it is to form an emulsion with olive oil, one part of the salicylic acid to sixteen parts of oil. This mixture is painted over the ulcerated surface once or twice a day. It gives rise to a slight smarting sensation when first applied, but that soon passes off.

Compressed Sponge for Abscess.

A patient had been suffering from mammary abscess for three weeks, but without any special benefit from treatment in checking the discharge of pus. It was decided to try the effect of compressed sponge, and for this purpose a sponge about ten inches in diameter was subjected to pressure and then applied by means of a bandage over the breast. After it had been in use forty-eight hours, the abscess was completely cured. No pain was experienced by the patient, and in this case the opening in the breast was three inches above the dependant part of the abscess. In applying a sponge to the breast in this class of cases, it is found of advantage to compress it when dry. After it is applied to the breast and firmly secured in position, a little water is poured upon it to cause expansion and the necessary pressure.

Apparatus for Cure of Fracture of Patella.

There has been recently a patient in hospital who had received a fracture of the patella, which did not unite. As a result of this unpleasant state of affairs, she was unable to extend the leg in walking, and found great difficulty in getting up and down stairs. She has, however, been so benefited recently by an appliance designed by Dr. Carney, of the hospital staff, that when she has it on she is enabled to walk with facility. The principle consists in using rubber as the extending power. The mode of application was to place a plaster bandage below the knee, having incorporated in its folds a loop of strong iron wire, of which the loop is projected above. A similar dressing was placed on the thigh, above the knee, with the loop of wire projecting downward. Folds of rubber were then attached to the two iron loops sufficiently strong to keep the leg extended when in a passive state. With this apparatus the patient was enabled to walk up and down stairs without inconvenience.

Wood Sorrel in Epithelioma.

The dried extract of wood sorrel has been used as a dressing epithelioma, and found to be more serviceable than any thing else in relieving the pain.

Treatment of Fistula in Ano by the Elastic Ligature.

The use of the elastic ligature in *fistula in ano* proves of more service than the knife in the few cases in which it has been employed. The method of applying it is to introduce the ligature by means of an eye probe, and allow it to cut its way out, which it does in from five days to a week. It leaves behind it a granulating surface which soon heals over. In one case the knife was used, and it was two months before the cure was complete.

Salicylic Acid.

In chronic cystitis, the bladder has been washed out with a solution containing one part in five hundred of water. The method of washing out the bladder has been to make four injections of one ounce each every morning and every evening. The acid not only removed the disagreeable odor of the urine, but in a short space of time freed it from pus. In empyema a solution of the same strength has been employed with valuable results. It is used under the same circumstances as carbolic acid was formerly. In dressing suppurating surfaces, it appears to have a stimulant effect on the granulations, somewhat similar to that of carbolic acid.

Melanosis.

There is at present in Roosevelt hospital quite a rare case of melanosis. The patient is covered over the entire body with a discoloration of a dark slaty hue. There are also tumors beneath the skin, situated on the face, body, and extremities. The disease first appeared about a year ago, and advanced rapidly to the state that it has now reached. Occasionally the melanotic tumors break down and suppurate. There is no history of hereditary cancer, or of syphilis.

Sciatica.

The treatment of sciatica is based on the view that it is usually due to malaria or syphilis, and for this purpose quinia is first given to the extent of sixty grains in twenty-four hours, followed the succeeding day by thirty or forty grains. If this fails to benefit, anti-syphilitic treatment usually proves effectual.

The Birds and the Insect Pests.

The western journals are beginning to wake up to the fact that the idea which we broached some time ago, relative to the wholesale slaughter of the prairie chickens and other feathered game having its result in an increase of the grasshopper infection, is founded on substantial truth. It is admitted that the destruction of the birds has been enormous, and that they have been trapped by thousands and fed to the hogs, on the theory that pork can be salted and sold while birds cannot. Now, let the journals suggest to their readers the necessity of game laws, rigorous ones, which will impose heavy penalties not merely for killing the chickens, but for exposing them for sale, and let local authorities see that such enactments are enforced to the letter. If this be done, and if the western inventors will give more attention to devising

exterminating machinery, by next year the hoppers, between the scorching from the machines and the hungry crops of the birds, will find life utterly devoid of pleasure, and perhaps may be induced to migrate out of the United States territory, say to Canada or Mexico.

There is another reason why the birds should be spared, and that is the potato bug. Prairie chickens and quail, it is said, will eat the insects, and other birds are said to feed upon them greedily.

Our Debt to Patents.

Ohio politicians and other individuals who believe that our patent system is of no advantage to the country, but rather a burden, and hence advocate its abolition, will find suggestive food for thought in Mr. Howson's essay on our country's debt to patents. We recently made a brief extract from this treatise, and now add another, in which the writer, in several happily selected instances, demonstrates how completely we are dependent upon patented inventions for not merely the comforts but the actual necessities of life. The same facts tend even more cogently to prove that the benefits which may accrue to an inventor from his holding a temporary monopoly on his device, no matter how much his gains may be, are infinitesimal beside the advantages which subsequently are secured by the public. It will be clear that scarcely any price is too high to pay for a valuable invention during the years it is protected by a patent.

Mr. Howson chooses the simplest articles, in everyday use, to illustrate his assertions. "Let us turn," he says, "to the paper on the wall, a paper of neat design, with ribbed and glazed surface studded with gilt sprigs. This is a home manufacture; for wall paper to the value of \$1,000,000 per year is produced in this city alone. The patents for the manufacture of paper, and economizing its production, are innumerable. Patent after patent has been granted for drying, glazing, printing, and other operations connected with wall paper; and the result of all this has been the permanent establishment of six large manufactories in this city.

Then look at the stove. Compare this stove with the open fireplaces in which our fathers burnt cords of wood, or tuns of coal, without obtaining a tithe of the heat which that ornamental structure generates. Compare it with the old anthracite stove of but thirty-five years ago. I saw one of these obsolete heat generators the other day, a hideous structure, with metal enough in its composition to make a cannon of small caliber—metal enough to make four modern stoves of equal capacity. There are, perhaps, more patents for stoves than for any other class of inventions.

There is a picture on the wall, a steel engraving—an art of which one of the greatest of American inventors and patentees, Jacob Perkins, was the father. In hanging the picture to the wall, I objected to the driving of nails, even if they were brass-headed, through the handsome wall paper; and I objected to the ridiculous and disfiguring inclined cords, and to the clumsy knot which is usually employed to conceal the nail. I discovered a patent molding which would serve the twofold purpose of a finish for the wall paper at its junction with the ceiling, and of a ledge to which could be adapted a gilt hook; and I found patent plated wire cord, almost invisible, with which to suspend the picture from the hook. By these appliances, I am enabled to slide my picture laterally to any position desired, and I dispense with wall-mutilating nails and clumsy cords. But I have not done with the picture yet. It has a gilt frame, consisting of a wooden molding, to which the composition for receiving the gold is applied by a well known process, forming the subject of an expired patent, and which has reduced the cost of ordinary gilt frames to such an extent that they are now to be found in the dwellings of the comparatively poor: whereas twenty years ago, handmade gilt frames were within the reach of the well-to-do only. It is only within a comparatively few years that sheets of glass, sufficiently large and clear for a picture frame of moderate size, have been produced in this country; and this production may in a great measure be attributed to patented glass furnaces, and hosts of patented appliances connected with glass manufacture.

Immediately in front of me is an ordinary panelled and molded door for a closet. A door like this, if made by hand, would cost just double the money for which a door of the same size and character, but of more accurate workmanship, can now be purchased at a large sash and door manufactory. This economy is attributable, in a great measure, and in the first instance, to Woodworth's patent wood-planing machine, which was succeeded by many valuable improvements in the same class of machinery; but there are many other patented machines which have contributed to this economy of manufacture—sawing machines, tonguing and grooving machines, molding machines, etc., for which patent after patent has been and continues to be granted. Patents for woodworking machinery may, in fact, be counted by the thousand.

There are two very important things, without which the door could not be completed; and these are glue and sand-paper. It may surprise many to know that Philadelphia can boast of the most extensive glue and sand paper factory in the world. It is a factory in which one thousand hands are employed. The foundation of this gigantic establishment was based on a series of valuable patents. It is but a comparatively few years since all the glue and sand paper used in this country were imported; now they are made, owing to patented facilities, so economically that much of the product of the factory in question is exported, while the home market is supplied at a cost less than half that which the imported materials cost a few years ago.

Compare the old costly hand-forged nails with the cut nails of the present day, which cost but little more than the metal

plates from which they are made. As immense sums of money have been expended in perfecting nail machines in this country, and hundreds of patents have been granted for improvements, we must conclude that the incentive to the outlay and expenditure of ingenuity is to be found in the protection which patents afford; and hence we may justly reason that these cheap nails of to-day are due to our patent system.

Then, again, the door is furnished with a lock such as is made in the large manufactories in New England and Pittsburgh—a lock that can be purchased at any hardware store at less than one third the price of one of the old handmade locks of equal quality. The art of lock-making has made rapid advances in this country, superiority and economy of construction being the characteristics of our homemade locks. When we take into account the many hundreds of patents which have been granted for locks, it will be evident that the progress of the manufacture is largely due to our patent system. The same remarks will apply to the hinges of the door.

Lastly, we have the screws by which the hinges are secured. The patented machines for producing these screws are numerous, and their production is rapid and economical. Take the patent gimlet-pointed screw: what facilities it affords for the carpenter's operations! What tedious manipulation it dispenses with!

The houses of our artisans and laborers, the comfortable homes of our struggling western farmers, are a source of admiration and astonishment to inquiring foreigners who visit our country. The cheap woodwork and cheap building hardware, which enter into the composition of these dwellings, owe their existence to the thousands of patents which have been granted for the articles themselves, and for the machines for the cheap production of the articles."

Useful Recipes for the Shop, the Household, and the Farm.

The following are freezing powders, which may prove useful in hot weather when ice is not attainable: 1. 4 pounds sulphate of soda, 2½ pounds each of muriate of ammonia and nitrate of potash; when about, to use add double the weight of all the ingredients in water. 2. Equal parts of nitrate of potash and muriate of ammonia; when required for use, add more than double the weight of water. 3. Nitrate of ammonia and water in equal proportions. 4. Carbonate of soda and nitrate of ammonia equal parts, and one equivalent of water.

The absolute strength of a well glued joint is given as follows in pounds per square inch:

	Across the grain.	With the grain
Beech,	2,133	1,095
Elm,	1,436	1,124
Oak,	1,735	568
White wood,	1,493	841
Maple,	1,422	896

It is customary to use from $\frac{1}{3}$ to $\frac{1}{2}$ of the above values to calculate the resistance which surfaces joined with glue can permanently be submitted to with safety.

The following is a good method of purifying lubricating oil: A tub holding 63 quarts has a tap inserted close to the bottom and another about 4 inches higher. In this receptacle are placed 7 quarts boiling water, 3½ ounces carbonate of soda, 3½ ounces chloride of calcium, and 9 ounces common salt. When all these are in solution, 45 quarts of the oil to be purified are let in and well stirred for five or ten minutes; the whole is then left for a week in a warm place, at the expiration of which time the clear pure oil can be drawn off through the upper tap without disturbing the bottom.

To remove rust from steel, immerse the article to be cleaned (for a few minutes, until all dirt and rust is taken off,) in a strong solution of cyanide of potassium, say about ½ ounce in a wineglassful of water; take out and clean with a tooth brush, with a paste composed of cyanide of potassium, Castile soap, whitening, and water.

To convert a wooden tray into a useful sink for photographic purposes, coat with shellac varnish. The latter can be purchased prepared; but, for the first coat only, it should be thinned with alcohol.

Microscopists collecting in the fields, who have not a glass slide at hand, will find the glasses of their watches an efficient substitute. If the watch be partially opened, the face forms a "white cloud reflector," and throws a good light through the object on the glass.

To test lubricating oil for acid, dissolve a crystallized piece of carbonate of soda about as large as a walnut in an equal bulk of water, and place the solution in a flask with some of the oil. If, on settling after thorough agitation, a large quantity of precipitate forms, the oil should be rejected as impure.

A varnish has been prepared from mica, which promises to become a useful article in the workshop, though at present it has been applied only to plaster casts and similar articles. Mica, calcined by fire or cleaned by boiling in hydrochloric acid, is reduced to as fine a powder as possible and mixed with collodion, when it can be laid on in successive coats like paint, giving the articles a silvery appearance. It may be colored by carefully grinding in the required pigment. The varnish adheres well to porcelain, glass, metal, wood, and plaster, and may be washed without injury.

To waterproof fishing lines, apply a mixture of two parts boiled linseed oil and one part good size; expose to the air, and dry.

Artificial grindstones have been made at Worms, Germany, of grit, soluble glass, and petroleum. The proportions are not given. It is said that they will bear a very high speed without becoming soft.