# CHEEKY GLASS MEN.

## The Process of Blowing in the Factories Produces Fat Faces.

## OVERFEEDING BRAIN WORKERS.

## A Clock Scheme by Which People Will Read the Time in the Sky.

## THE LITHO-CARBON FIND IN TEXAS

[WRITTEN FOR THE DISPATCH.]

Dr. Regnault has called attention to some singular phenomena in connection with the glass-blowing industry. Among these is the dilatation of the cheeks of the glass blowers. The work of glass blowing requires long training, as great skill and delicacy are necessary. The apprenticeship which every hand must serve begins, as a rule, at the age of 12 or 15, when the cheeks are not yet formed. The change is a gradual one, and for the most part takes place imperceptibly. The dilatation varies in degree, and frequently is only perceived when the cheeks are inflated.

An interesting accompaniment is the dilatation of Stenson's duct. After the patient has ceased to blow and the cheeks have subsided, there remains still some air in the canal, and gaseous crepitation can be perceived on pressing over it. Fortunately the inconveniences to which this condition gives rise are comparatively slight, consisting of occasional difficulty in keeping the food from getting between the teeth and the cheek, and a tendency to white furring of the inside of the cheek, necessitating the use of an antiseptic mouth-wash.

Dr. Regnault remarks on the interesting fact that sculptors, in representing Tritons blowing into shells, have reproduced exactly the deformities incident to the ailment.

### Overeating a Source of Trouble.

A physician warns brain workers against overeating, and states that the breakdown of active brain workers is often caused by the overstuffing of their stomachs, when it is attributed to brain fatigue. He says that hard work, mental or physical, rarely ever kills. If a mild amount of physical exercise be taken, and a judicious amount of food be funished, the functions attended to, the surface be protected by proper clothing, and a philosophical nature cultivated, an almost unlimited amount of work can be done for an indefinite length of time, bearing in mind always that when weariness comes rest must be taken instead of stimulants, so that there shall be no working on false capital.

### A New Mineral Wealth.

Litho-carbon has been found extensively in the remoter parts of Texas, where it lies in veins from 2 to 40 feet thick. These veins have the appearance of sea shells held together by sand and some dark, sticky substance, which is separated from the shells and sand by benzine. This mineral is said to be odorless and tasteless, resisting equally the action of water, heat, alkalies and acids. Such a material would find many uses, and even when divested of many of the extraordinary attributes with which the glowing Western imagination has clothed it, would still find a ready market in the paint and varnish trades, as well as in work requiring special fireproof and waterproof qualities.

### Activity in Electric Traction.

The amount of energy that is just now being directed to the furtherance of electric traction schemes has a most significant bearing on developments which may shortly be looked for in this field. In addition to the operations which are being pushed in this country in the direction of establishing electric locomotives on trunk lines, the Stemens conduit system, as used at Budanest, is shortly to be introduced here by a powerful syndicate. In England there is equal activity. An American engineer is now in London organizing a company for the purpose of exploiting his system of open conduit for electric traction. Besides this a London firm is expecting to make installations of an excellent open conduit system, and a closed conduit system is very favorably regarded in the same city. Work is also being pushed forward in both overhead and accumulator traction, and altogether the chances of the evolution of a cheap, clean and efficient method of travel, that can be easily adapted to the wants of the people, are daily increasing.

### Cutting Ice by Electric Wire.

A new departure in ice cutting has been proposed by an electrician, who contends that it is quite practicable to cut the ice by means of a wire heated electrically. His plan is to instal a portable steam and dynamo plant at some conenient point on the shore near to the ice harvesting operations, and run from the dynamo a suitable steel wire of the required length with a proper return. By generating a sufficient current to maintain the temperature in the wire at about 200°, and by stretching the wire taut along the surface of the ice a means of cutting through the mass would at once be established. He forgets that the water would congeal immediately after the wire had passed, leaving the ice as solid as ever.

### A Sea Telephone.

The latest invention for transmitting sound waves under the sea is the nautical signal, or sea telephone. This apparatus is designed for the detection of sounds proceeding from any object in contact with water, which may be produced by such object or from the use of the apparatus at the place of observation or reception, and are there received when reflected from such object. The idea embodied in the apparatus is to receive sound waves pulsating in a body of water, then transform, intensify, transmit and indicate the impression so produced in such a manner that it will be easy to determine the position, distance and orbit of the object from which the sound waves proceed. It is claimed that this invention will give warning not only of moving objects, but also of stationary ones, such as icebergs, submerged wrecks, rocks, etc., and that by its use communication may be had between two ships at a considerable distance from each other.

### A Bee Pest in New Zealand.

Another exemplification of the ease with which man can fall from Scylla into Charybdis is afforded by an experience through which New Zealand is now passing. Some years ago the bumble bee was introduced into that country for the purpose of fertilizing the red clover, and the experiment was regarded as a remarkable success. A naturalist who has lately made a list of the plants and flowers visited by the bees in their new home, finds that not only do the insects fail to visit the flowers of indigenous plants, but that they have increased to such an extraordinary extent that they threaten, on account of absorbing so much of the nectar of the clover flower, to become a serious pest to the apiarist.

### A New Home-Made Ink.

It has been found by the manufacturers of ink that the growing use of the typewriter has appreciably affected their sales, and now another rival has arisen in an ink powder, which needs but a drop of water to make it a perfect writing fluid. This is not a new idea, and so far it has not been generally adopted, as powder inks heretofore have had a goo deal of sediment and an unpleasant smell. These disadvantages are said to be now removed, and it is claimed that travelers on board ship, solicitors, accountants and others who frequently need the ink bottle, and find carrying it inconvenient, will find the new ink powder of great service.

### Destroying Insects in Mills.

To millers whose mills are infested with insects an exchange recommends the use of bi-sulphide of carbon. The cheapest grade will serve the purpose of destroying insect life. It volatilizes readily, and, as the vapor is heavier than air, it falls instead of rising. It has a disagreeable odor and is very inflammable. The apartment in which it is to be used should be thoroughly cleaned and made as airtight as possible, so as to increase its effectiveness.

### Manufacture of Sleigh Bells.

There is a story of one of the kings of England who lived in the early part of this century, who was much exercised, on happening, while out hunting, to take shelter from the rain in a woodman's cottage, to know how the apples got inside the dumpling that the cottager's wife had dished up for dinner. A more difficult problem is to find out how the little iron ball called the "jinglet," which makes the music of the sleigh bell, is placed so securely in its case. An iron founder describes the process of manufacture. In making the bell the jinglet is put inside a little ball of mud, just the shape of the inside of the bell. This mud ball with the jinglet inside is placed in the mold of the outside, and the metal is poured in, and fills up the space between the ball and the mold. When the mold is taken off the bell will not ring, as it is full of dirt. The hot metal, however, has dried the dirt, and it is soon shaken out.

### Collapsible Life-Raft.

A collapsible life-raft has been brought out, which is likely to be of great service in cases where the use of a life boat is impracticable or unavailable. The raft is built with 90 water-tight compartments, and is practically unsinkable. It can be sailed or rowed. A clear run, fore and aft, is secured for naval and military purposes, and if joined front to end the rafts will form a bridge of boats, especially adapted for landing guns, troops, etc.

### Making Iron Pipes Rust-Proof.

A leading scientific journal states that sheet iron pipes can be kept from rusting by coating their sections with a coal tar, then filling them with light wood shavings, to which fire should be applied. It is contended that by strongly heating the iron after the tar is laid on the outside, the latter is literally burned into the metal, closing the pores and rendering it rust-proof in a far more thorough manner than if the tar itself was first made hot and applied to cold iron, as is the usual practice. The pipes should not be made so hot as to burn the tar off.

### The Magnetization of Watches.

The chances of a watch being affected on an electric railway need ordinarily give but little reason for anxiety, but electricity is now coming into such general use that there are many conditions of daily life in which an ordinary watch, which has a brass and steel balance wheel and a steel hair spring, is likely to be affected by the current. The amount of injury depends, of course, upon the intensity of the magnetism to which the watch is subjected. In many cases where the magnetism is slight, watches simply lose time, say from 5 to 125 seconds an hour; in other cases—and they are numerous—the watch ceases to run and is practically ruined. The only remedy is de-magnetization, and that never completely restores the original time-keeping qualities. A watch once magnetized can be partially but never fully demagnetized.

### A Clock in the Skies.

The idea of magnifying the indications resulting from the working of an ordinary clock to such a size as to permit of their being seen for a radius of 50 miles around is being put into practical shape in England. In a recent invention the actual time-indicating clockwork, which is the same size as an ordinary turret clock, is connected to a second train of clockwork, controlled by the clock proper. This supplementary clockwork is put in motion every minute, when it whizzes around (regulated by an ordinary fan governor) and actuates an electric flashing lens, in much the same way as the striking mechanism of a clock usually acts. The beam of light reflected in the sky goes through the movements of a striking hammer when the clock is indicating the even hour. Besides this another symbol is used for every complete five minutes, and yet another for odd minutes. Thus, supposing the time to be 7:27, this would be denoted by the seven beats in the first instance, then five other signs (indicating 5x5 minutes), then two short, sharp flashes for the two odd minutes. This operation is gone through with every minute, the signalling taking on an average about ten seconds. It is evident that such a system can be modified to suit all sorts of conditions, and further that the code has only to be understood to enable any one to read the sky clock with ease after a little practice.