

longer." The specification concludes with an important reservation: "While the dimple process is applicable to those whose faces comprise a soft, velvety, or plump surface, as then a very deceptive dimple can be produced, it is not so available for thin or bony faces, nor where the skin is very thick and unyielding."

A complexion improver which has had a great run is a sort of mask, of very thin India rubber, to be worn over the female countenance when in bed. It has slits for eyes, mouth and nostrils and when firmly strapped on causes profuse perspiration, which is warranted to clear the skin of tan and wrinkles. There have been a dozen applications made for setting diamonds in the front teeth, holes being drilled to receive the gems; and of course dental surgeons have patented processes without number for imitating gold filling in false teeth. This is done by burnishing gold foil upon them in the manner termed "fire gilding," the object being to deceive the beholder into the belief that the conspicuous signs of repair mean natural teeth, not artificial. There are several imitation noses, too, made of papier mache enamelled to imitate the skin. The most curious of these is attached to a pair of spectacles, so that the owner—who has lost his nasal appendage by some accident, or may not be satisfied with the style and shape of the one nature bestowed upon him, may put on a beautiful new nose with his glasses. When the enamel wears off a little and proboscis begins to look shabby, all he has to do is to touch it up with water colors. Fancy the puns that the wearied attendants around the case which contains this invention are daily compelled to hear concerning the coloring of noses by glasses under them!

One of the most novel patents ever issued was secured by a Boston woman on a device for restoring facial symmetry. The idea is that if a gentle, continuous outward pressure is maintained on the cheeks, from inside the mouth, the full and plump effect of the youthful face will in time be restored. To affect this, a couple of disks, mounted on prongs, are made to press the inside of the cheeks and push them out, by means of a spring attached to the teeth. I presume that care must be taken and not press too much and produce the effect of the mumps, and to unscrew the thing when eating, so as to avoid swallowing the contrivance and making an enlargement of the stomach instead of the spot intended. A Philadelphia lady, horrified by the unbecomingness of the ordinary "preserver" which once saved her life at sea, has designed a shapely life-preserving corset, to be worn by either sex when boating accidents are apprehended. Thus a lady or gentleman going to Europe may literally "steel" him or her self against an unpleasant interview with Neptune by reason of burning ships or raging storms.

And there are nearly as many devices for enchanting masculine beauty, proving that vanity is not confined to the weaker sex. In the line of mustache guards alone there are upwards of 100 patents. Some take the form of metal contrivance for the cup, or glass. One is a gold plate, with a spring, which may be attached to any drinking vessel at a moment's notice. One is especially designed for beer glasses. A tube connected with it goes down deep into the beer, so that the imbiber gets no foam on his lips. Similar devices are applied to spoons. Other guards, of fine wire nets, have wires attached which pass back of the ears like spectacles and hold the contrivance on; while others are merely a pair of springs, in the form of a helix, one of which is made to gently lift each side of the hirsute appendage away

from the mouth. That reminds me that the enterprising citizen of D. C. who invented and is now manufacturing artificial straws, through which to suck lemonade, etc., has grown very rich thereon—though one would think the natural straws would be cheaper. The District of Columbia, by the way, already takes high rank as the seat of inventive genius—perhaps because people's ideas are stimulated here by seeing so many things in the patent office. The annual report of the commissioner of patents embraces a tabular statement showing the number of patents issued during the year to each state and territory, and the ratio between the patents issued and the population. Very naturally, having the largest population, New York receives more patents than any other state—3771. Next to New York come the great state of Pennsylvania, with 2,034; next Massachusetts, with 2,846; next Illinois, with 1,098, and next Ohio, with 1,091 patents. But the proportion of patents to population is more significant. In the preceding report of the commissioner Connecticut led the list, with the District of Columbia following, but the report for the entire year of 1875 reverses the order and places the District in the van. In the District the table shows that a patent was issued to every 615, and in Connecticut to every 761 of the entire population. Massachusetts stands third in the list, the proportion being one to every 787. Rhode Island follows with one to every 943. The least inventive state, as shown by the table, is Arkansas, which received but one patent to every 44,042 of her population.

The inventions of women cover a very wide field, from beauty improvers to baby-jumpers, from devices for lessening the work of the housekeeper to the most intricate of scientific instruments, textile machinery, electrical apparatus, telescopes, firearms, etc. It is estimated that up to date Uncle Samuel has granted something over 155,000 patents, about one-fourth of them having been applied for by women, 62 of them lived in Washington and 400 in New York City. The first female inventor on record in the U. S. was Mary Kies, of Connecticut, who in the year 1809, invented a process of weaving straw with silk. It was a woman who brought cream of tartar into the market; and it goes with saying that the same sex introduced the bustle, and the quaint headgear called "calash." The advancement of women can perhaps be measured as well by the number and kind of their inventions as by any other standard; therefore it is encouraging to know that since 1891 they have received as many patents as all the previous years put together, and that they represent departments in science and art into which they have never before ventured. Another proof of the public recognition of their ability is in the respect now paid to the models of their inventions, which have lately been gathered into one exhibit and placed in a conspicuous position in the Patent Office. To women are due many of the improvements which make travel less dangerous and uncomfortable today than in the time of our grandmothers. They have invented car-couplings which do not mash so many train hands, heaters warranted not to set the cars on fire, car-steps which one can ascend and descend without testing the utmost width of ones petticoat, apparatus for sanding railroad tracks, attachments for unloading box-cars, hoods to prevent smoke from pouring backward, devices for keeping cattle off the tracks, and goodness knows how many more. Conspicuous in this end of the century is Mrs. Maria E. Beasley, whose scheme of a new railway system, if brought to the successful completion predicted by engineers and busi-

ness men, will revolutionize the present mode of transportation between the East and West. Railroad men have for many years been puzzled over the question how to carry perishable commodities long distances and preserve the large per cent of them now lost; and a woman is the first to solve the troublesome problem. Mrs. Beasley, with others, felt that refrigerator cars would never be made satisfactory, for some things will not bear an undue degree of cold; and that a system furnishing greater speed than any in use today must be invented. So she set her wits to work on the old idea of connecting great commercial centers in opposite parts of the country, by elevated railroads with two tracks, upon which the cars will travel without stops at any way stations, and uninterrupted by any local traffic or street crossings. The motive power is to be electricity, supplied from stations arranged every fifty miles along the route, and applied through Tesla's latest improvements in current transmission. Mrs. Beasley's particular invention is the lock between the cars and track, which guarantees her road greater safety against jumping of rails than any offered by our present mode of surface transportation. Those of my readers who went to the World's Fair, in Chicago, will remember seeing Mrs. Beasley in the transportation building.

Women's inventive genius has not omitted the gruesome, as well as the ridiculous. They are responsible for several improved corpse preservers, and burglar-proof tombstones, and indestructible funeral wreaths. One device is a small flat case containing a photograph of the late lamented; and on the movable cover is inscribed these words: "Look at me and cover my face." A sort of locket, of asbestos or lava, has been patented, to be carried in the pocket of anybody who starts on a railway journey. If there should be an accident, like the Ashtabula horror, and the wearer is burned up, the locket, being of indestructible material, will be found intact with his charred and otherwise unrecognizable remains. On the cover is stamped the words: "Address inside;" and on opening it, the finder sees the name and address of the unfortunate traveler.

Among the queerest inventions is a luminous cat, to frighten rats and mice at night; a trap for catching tape-worms; a fastening with which to secure a brick to a cow's tail, to prevent her switching it in the milker's eyes; a combined trunk and house, in which persons of small means may live in a small way when traveling and save hotel bills; and a combination plow and cannon. The beam of the plow is made of iron and bored out so as to form a cannon. Whenever the farmer, while at work in the field, sees savages or tramps approaching, he has only to unhitch his team, so as to get them from in front of the muzzle, apply his match and say his prayers, and trust Providence for the result. It looks as if the farmer were a good deal more likely to be killed by the recoil than the foe by the shot; however, one must leave something to Providence. In case the gun went off while in use as a plow, Divine interference would certainly be necessary to prevent disaster both to team and farmer.

The tape-worm trap is still more curious. It consists of a hollow ball, divided into two parts, which are hinged together and provided with a spring upon their inside, so that they may be made to snap together like a steel trap. The unfortunate individual in whose interior the long drawn-out reptile has taken up its abode must refrain from eating till near the point of starvation. Then he bites his little trap with some choice morsel, swallows it, and keeps firm hold of the string;