

SALICYLIC ACID.

The field for the utilization of salicylic acid is rapidly being widened. Experiments recently made in England show that raw wool washed in a solution of this acid, one part; soft soap, 500 parts; water, 2,000 parts, did not show the least sign of mildew after being stored for a considerable period. Yarns intended for storing were successfully treated in the following way: In greasing them during the process of carding, one part of salicylic acid was added to 500 parts of grease or oil which was used. This small quantity of salicylic acid entirely prevented any signs of deterioration by age, and entirely takes away that offensive smell of rancid oil so often observable. Woolen cloth, when treated in the last wet process with a solution of one part salicylic acid to 500 parts of water, retained its gloss much longer than by any other process hitherto employed.

In finishing cotton goods salicylic acid was added in the proportion of from one to four ounces for every hundred pounds of material being finished, and the goods thus treated were preserved free from mildew or decomposition, even with a prolonged storage. Warp which had been kept for a long time upon the spindle was kept fresh and sound when subjected to the same treatment. The addition of from one to four ounces of salicylic acid to five gallons of finishing material will be found an infallible agent for warding off an attack of mildew from cotton textile goods as well as preventing the unpleasant smells they are so liable to. While not indispensably necessary to goods which are disposed of soon after their manufacture, the addition of salicylic acid to the finishing material will be found to have great favor with the public from the fact that goods keep their original appearance, don't mildew, and do not take on a bad odor when being kept in stock or shipped on a long journey.

INCREASE OF RISK FROM LIGHTNING.—The progress of civilization brings with it ever growing dangers. Herr Von Bebold inferred already in 1869, from observations taken in Bavaria, that there was an increase from year to year in the number of buildings struck by lightning. There seemed to be also an increase in the number of thunderstorms, and this was assigned as the cause. A little later, observations (by others) in Saxony and Schleswig-Holstein also showed an increase in the number of houses struck, but no comparison was made with the number of thunderstorms. Herr Holtz has lately made a fuller inquiry on the basis of data from all parts of Germany, and from Austria and Switzerland. In his brochure on the subject he publishes two tables, one to show the increase or decrease of thunderstorms since 1854, since 1862, and since 1870 in the different regions; the other the increase or decrease of lightning risk estimated from comparison of the number of lightning strokes on houses with the entire number of houses. It appears, then, that while any increase in the number of thunderstorms is extremely small, and there is in some cases even a decrease, the lightning risk shows a very large increase, and in no case a decrease. Thus the increase of risks from lightning must be regarded as not due, unless in very slight measure, to meteorological influences. This appears more distinctly in that the increase of lightning risk is proportionally greater as the compared years are further apart; but it is not so with the increase of thunderstorms (which, e. g., is less since 1854 than 1862). To explain the increased risk by telluric changes, Herr Holtz supposes the clearance of forest land has to do with it, perhaps, also, the increase of railways, both of these bringing thunderstorms more to towns and villages. Another probable cause is the increased use of metal in house construction.

There is no contending against necessity, and we should be very tender how we ensure those that submit to it. It is one thing to be at liberty to do what you will, and another thing to be tied up to do what you must.

A FULL CUP.—When the saintly Payson was dying, he exclaimed, "I long to hand a full cup of happiness to every human being." This was the language of a heart thoroughly purged of all selfish affection and filled with the spirit of that love, which led our adorable Jesus to give his life for human redemption. If every Christian would go out daily among men, filled with such longing for human happiness, what marvelous changes would soon be wrought in human society! The selfish element would be eliminated from the dealings of the Christian business man. Not justice merely, but benevolence, would enter into his every-day trade. The same spirit would rule his home and church life. He would become an incarnation of good will toward all, and would so preach the Gospel by his deeds that man would see his good works, and glorify his Heavenly Father. The spirit of Payson is worthy of every man's imitation. Happy he who can truthfully say, "I long to hand a cup of happiness to every human being."—*Zion's Herald*.

THE PRACTICAL VALUE OF SCIENCE.—I have endeavored to state the higher and more abstract arguments by which the study of physical science may be shown to be indispensable to the complete training of the human mind, but I do not wish it to be supposed that because I may be devoted to more or less abstract and unpractical pursuits I am insensible to the weight which ought to be attached to that which has been said to be the English conception of Paradise—namely, "getting on." Now the value of a knowledge of physical science as a means of getting on is indubitable. There are hardly any of our trades, except the merely huckstering ones, in which some knowledge of science may not be directly profitable to the pursuer of that occupation. An industry attains higher stages of its development as its process become more complicated and refined, and the sciences are dragged in, one by one, to take their share in the fray.—*Huxley*.

FRIENDSHIP has its duties. You owe your friend sympathy in his sorrows and in his joys. You owe him confidence and the information about yourself which confidence implies. Yet that information is to be given with a certain reserve, so that you do not seem to force your affairs upon him, or to make him responsible for you. Of crises in which he could not aid you, or would be pained by his inability, it is often wise to say nothing. There is a fine subtle instinct which guides in such matters. However near your friend brings you to him, you are to respect his individuality. Information that is purely personal you must wait for. If he does not volunteer it, be satisfied that he has his reasons. Do not seek—above all, do not claim—it as a right of your friendship. Be generous, not exacting.

THE PRESIDENT'S MOTHER.—The happiest person in the country on the 4th of March, 1881, undoubtedly was the venerable mother of James A. Garfield; and she had the highest right to be. Left a widow with her small children, who, with herself, were quite dependent upon her own exertions for support, she kept her little flock together, and demonstrated, as have many other women also, "what a woman can do." And now her boy is President of the United States of America. All honor to the good mother! Remarkable men almost never have remarkable sons, but a boy that amounts to something "uncommon" almost invariably has been blessed with a superior mother. So far as the human race goes, the mother is the prime factor in excellence.—*Rural New Yorker*.

ESTIMATE actions not by their overt results merely, but by the real though latent power that is implied in them, and the most brilliant deeds of outward heroism will sometimes fall far short of those quiet victories over self to which the Omniscient eye alone is witness.

RICH DISCOVERIES.—A letter from Pitkin, Colorado, says that great excitement prevails there over the discovery of carbonates, and the whole Park, clear down from the Silver Islet mine is being staked off by an eager and lazy mob of men. A body of gray sand carbonates, 4½ ft. thick, has been found in the main shaft of the Silver Islet, at a depth of 50 ft. Assays give 132 ounces of silver, 168 ounces and 264, and about 40% of lead. In the Garfield lode, situated in the Park, carbonates running as high as 170 ounces of silver and 60% of lead were discovered at a depth of 60 ft. The Chicago lode is proving one of the best in the district. The shaft is 60 ft. deep, and an adit-tunnel has been driven in on the vein 85 ft. Further down the hill a tunnel has been started that will cut the vein 300 ft. deeper than the above named workings.

MRS. HAYES' PORTRAIT.—The opening words of President Garfield in accepting for the White House the portrait of Mrs. Hayes were not telegraphed, but are reported in the Washington papers as follows: "The very appropriate gift to the Executive mansion which you have brought—the portrait of its late mistress—I gladly accept. It shall take its place beside the portraits of the other noble women who have graced this house. Nothing I can say will be equal to my high appreciation of the character of the lady whose picture is now added to the treasures of this place. She is the noble friend of all good people. Her portrait will take, and I hope will always hold, an honored place in this house."

THE GAIN IN WEIGHT BY COMBUSTION can be very prettily shown by the following method, which also affords a very good lecture experiment. A handful of fine zinc turnings is placed on the scale pan of a common balance, which should then be brought into equilibrium by placing weights on the other scale pan. Now apply a spirit lamp or Bunsen burner to the zinc, which, in its state of fine division, will readily inflame. As it is slowly converted to a cohesive mass of oxide, the scale pan will descend, showing that in burning it has gained in weight.

A PHILANTHROPIST.—Speaking of her past, Mrs. Thompson, the philanthropist says: "I was a poor girl myself, born and raised in Vermont. I had a sensible mother, thank God! who taught me, in fact, rang into my ears day and night almost, that 'handsome is that handsome does,' and I have tried never to forget it. It was my good fortune to meet Mr. Thompson, and we were married. It is now some 12 years since his death, and I have always felt that I could in no way so well show my reverence for his character and name as by using the means he so generously intrusted to me to alleviate the sufferings of humanity."

MUSIC IN DISEASE.—Dr. Oscar Jennings, a physician of standing in Paris, writes to the *London Lancet*, that in the treatment of mental disease he has constantly used music, which calms and soothes the mind, and declares it to be too precious an agent to be neglected. This is both scriptural and poetical indorsement. Saul of Tarsus was cheered by music, and the poet recognizes it as the soother of the savage breast, while Shakespeare denounces "he who has no music in his soul is fit for stratagem and spoils."

EGG DUMPLINGS.—Make a batter of a pint of milk, two well-beaten eggs, a teaspoonful of salt, and flour enough to make a batter as thick as for pound cake. Have a clean saucepan of boiling water, let the water boil fast, drop in the batter by the tablespoonful (four or five minutes will boil them), take them with a skimmer on a dish, put a bit of butter and grated nutmeg, with syrup or sugar over.

We are all sculptors and painters; our material is our own flesh and blood and bones. Any nobleness begins at once to refine a man's features, any meanness or sensuality to imbrute them.