

filtered water clearer than this. These lakes will in time be dammed and the water held until it is wanted in mid-summer.

I have not been to all of them, but on the Provo and Weber side I have been to sixty-two. These lakes are from a quarter of a mile to two and three quarters of a mile around.

When Salt Lake City gets short of water, there is the place to get it. I look upon them as the grandest water resources in the land, and the cheapest to bring in to this city.

This has been and will be again one of the greatest game countries in the West, when the park shall be protected from the slaughter of game: Bear river at the head runs northeast into Wyoming, thence north to Soda Springs, Idaho, thence southwest into Great Salt Lake, gathering water from many springs and rivulets until it is a large river. Its course is something of the shape of a wagon bow. The Weber starts to the northwest, and gathers the waters of many a hill and dale; its general course is northwest until it empties into the Great Salt Lake near Ogden, having made a half moon in its course. The lakes that form the head of Provo lie around the west of the mountain. The Provo river runs south and then west, supplying many landholders enroute, and then empties into Utah Lake. One of the lakes that supply it lies on a divide, and while on the north side the water runs into the Weber, at the south a stream runs into the Provo river as well. The Duchesne has a few lakes lying close up to the mountain, on the south side, which are its headwaters. This river is but a small stream, running through a vast forest for a great many miles. These forests should be covered by a park, well protected to save it from the settlers who will settle the Indian reservation ere long.

It is not the amount of snow that falls, but what is retained that does the good that is so essential to us all in Utah; hence we should protect the tree that in turn protects the snowdrift. Another reason why Congress should grant this request for the park is that there is not another spot on earth like it. To stand on this mountain and gaze upon this great panorama of nature is indeed wonderful. Mountain peaks large and small, and of every conceivable shape—from a sugar loaf to a coffin—all standing out from one another and seeming to be vying with each other which should look the most majestic and the grandest! It would take the scenery of the Alps, the lakes of Switzerland, the river Rhine, and the Sierra Nevadas, all together to rival this beautiful spot. There is not a dollar to be spent on it except to make a road to it. The day will come when there will be built a railroad like that up Mount Rigor or Pike's Peak. Tourists and artists need not go to Europe; but by all means visit the Park of Utah and behold the great works of nature.

In conclusion I would say let each man, woman, and child in Utah plant a tree this year and each succeeding year. Then it will not be long until we will have all the timber we want.

The time for planting is from the time the acorn falls in the autumn until the buds come in the spring.

Colonel M. B. Krogh Holst, of Stanger, celebrated his 50th anniversary as an officer in the army.

## HEALTH HINTS FOR THE SCHOOL ROOM.

Following is a synopsis of a lecture on Health Hints For the School Room, delivered by Dr. Charles F. Wilcox of this city, before the last meeting of the Salt Lake County teachers, held on Saturday, January 26th:

### IMPURE AIR AND VENTILATION.

The subject of ventilation, for the purpose of securing an adequate supply of pure air is one of much importance.

The dangers of impure air, water and food depend largely upon the fact that media may be introduced into the body particles of organic matter, living or dead, which tend to produce disease in the recipient.

The impurities of air which are to be disposed of by ventilation are for the most part derived from the human body, chiefly from respiration.

The impurities of air, due to the presence of human beings consist mainly of carbonic acid, sulphuretted hydrogen, and of various organic compounds mostly in the form of minute particles of organic matter of uncertain structure but extremely prone to decomposition.

It is usual to estimate the degree of impurity by the amount of carbonic acid present, although carbonic acid itself is not injurious to health, unless present in much greater proportion than that in which it will be found in quite crowded habitations.

It is imperceptible to the sense, and is merely taken as the measure of impurity because of the readiness with which tests can be made to determine its presence. Repeated tests prove that when it is present in excess of 6 parts in 10,000 volumes, there are many organic impurities present which have an injurious effect upon the system saturated with it.

The following test is quite satisfactory:

Let a person having a normal sense of smell enter a room from the fresh air; if he detect a musty or disagreeable odor, there is an excess of carbonic acid impurity present, and also minute particles of organic matter undergoing decomposition.

The evil effects of breathing such air are—headache, languor, loss of appetite, sore throat and the general lowering of the vital forces, rendering the body liable to contract any of the accidental diseases which happen to be prevailing at the time.

The defect in most places for ventilation is in the air supply. Many people suppose they have made all necessary provision for ventilation, if they have put in tubes or openings for the escape of foul air, forgetting that these outlets have no effect if corresponding inlets are not provided.

It is not necessary that the outlets be of greater diameter than the inlets, as some have supposed, to allow for the expansion of the heated air, as the velocity of the outgoing current is usually greater than the coming in.

The real difficulty of a perfect system of heat and ventilation is the expense.

In cold weather the air must be warmed to secure comfort; it must be changed to secure ventilation. The changing of the air carries off heat, the loss of which must be supplied by fuel, which fuel costs money. The greater

the ventilation, the more rapid the change and the more heat required.

### EXERCISE.

The ease and the completeness with which the functions of an organ or, of an organism is performed depend to a great extent upon the frequency and regularity with which such functions are exercised. Hence comes the importance of bodily exercise for the preservation of health.

Bodily exercise means more than the development of muscle. The nervous system requires exercise even to a greater extent than the muscular. It is worry that kills, not work.

It is estimated that exercise equivalent to a walk of eight or nine miles a day, is required to maintain the body in a healthy state. The majority of trades and bodily occupations demand at least this amount of work.

One of the most important questions with regard to physical exercise is the extent to, and manner in which it should be provided for in a proper system of education.

There are three classes of exercise in vogue:

1. The gymnastics of the Germans.
2. The Swedish system, which consists in a variety of simple though varied movements.
3. And the English system, or rather want of system, consisting largely of athletic games and contests of various kinds.

The best form of exercise is that which takes the person into the fresh air. If the exercise be of a pleasurable nature so much the better. Relaxation of the pent up nerves is best accomplished by gentle exercise without fatigue. Such exercise has a beneficial effect upon nutrition by stimulating the action of the heart, accelerating the circulation and increasing the respiration. It thus increases the oxidation of waste products and leaves room for the assimilation of nutriment.

Walking, riding, bathing, boating, etc., comes under this head.

Persons engaged in mental work are not able to take as much physical exercise as those who are not.

Expenditure of brain tissue is not to be repaired by muscular exertion, but by sleep and food, and exercise in the open air sufficient to produce appetite and sufficient weariness to insure restful sleep.

Exercise for the sake of health and comfort is not an end, but a means, yet if this means can be made to secure to the person an end agreeable and pleasant in itself, so much the better.

Violent exercise is positively injurious and should not be indulged in to excess. The most dangerous game that has been invented is foot ball. Several fatalities have resulted the past season, and permanent injuries are frequent. The attendance of a surgeon and attendant with dressing at each game of foot ball played at West Point military academy is compulsory. The game of foot ball should either be modified or prohibited.

### TEST EXAMINATIONS AND GRADING.

The danger of injury from overwork under excitement is a very real one in many of our schools.

The system of pass examinations, in which the standing of the pupil is to be determined, not from the average results of his daily recitations, but from a