Alder 32, N. C. Sorenson 23, Charles Kemp 24; Superintendent of District Schools, Peter Greaves 74.

A. HATCH DEFEATED.

It seems tolerably well assured, from the latest telegrams received, that one member of the House accredited to the Republicans in yesterday's NEWS—A. H. Hatch, of Heber City—is not elected and that his Democratic opponent, L. M. Olson, is. This makes a change in our table of members elect as published yesterday, giving the Democrats 24 members, 8 in the Council and 16 in the House, with no Republicans. This gives the Democrats exactly two-thirds of each branch.

ARCHITECTURE IS AN ART.

The miserable school buildings of the past, when school months were few and the average years of study less, were bad enough; but how entirely inadequate in their provisions and utterly absurd are they now, when we consider the needs of the more studious and less active race of today. It is astonishing how many so-called modern school buildings are being erected in utter disregard of all hygienic requirements. The main idea seems to be enclosure. The vital principles and demands of optics, acoustics, respiration, ventilation, sewerage and physical exercise are entirely ignored. For six hours a day and nine months per year children are huddled together in miserable rooms, where improper lighting and stagnant atmosphere make one feel that God's free sunshine and pure, invigorating air are expensive luxuries. For these mistakes are responsible conjointly the people, school boards and architects. The people in the first place, because they constitute the public, and the public in this country is everything. By their false ideas of economy and their ignorance of hygienic principles, and their demands that architecture should be without rather than within, buildings are erected totally unworthy of the great and honored use for which they are intended. The wants of the school and the general features of the building should be determined. After that it pays to employ only the best architect, one who in the arrangement of his plans can bring to bear years of study, extensive observation, wide views and successful experience, one who may have made mistakes, but never the same mistake the second time. Such a man in the construction of a building, small or large, is worth more than the cost of the building itself. It takes brains as well as brick and mortar to make a well constructed building.

But even among architects there are many quacks, cranks, and other dangerous leaders. As in other professions, many a man is in demand and is successful who never merits success. The obtaining of employment and the making of money determine the plans of the architect far more than the higher possibility of his work. Architecture is an art, and should never be prostituted to a baser position. By this I mean the architect should be a man devoted to his work and unyielding in his convictions and principles, preferring rather to lose a contract than to erect an ignoble building.

I take it for granted that in every well ordered community the school house should be pre-eminently the building of the locality. The building should be centrally located and accessible, but never so at the expense of healthiness of site, proper size of grounds, and freedom from noise. An even but moderate slope, south preferred, with perfect facilities for sewerage and drainage, is desired. The site should furthermore be remote from railways, noise of busy streets, mills and factories, and from rivers, canals, places of amusement, breweries, and all penal and objectionable institutions. The grounds, at least in the cities of the second class and smaller, should not be less than one acre for a building of eight rooms, with an additional acre for every other four rooms.

The school building should never be more than two stories and basement in height. Less than this is frequently desirable, providing the ventilating stack can be sufficiently high to do its work properly. The ceiling of an ordinary schoolroom should be from thirteen to fourteen feet high—more is a disadvantage—and the basement eight or nine feet high. If the basement is to contain playrooms, it should be one-third under ground; but if not, then nearly all. In the entire arrangement of the building the aim should be to reduce as much as possible and render easy the climbing of stairs. The angle of ascent should be about 30 degrees. It would be well, if possible, to have a separate flight of stairs for high school pupils.

In passing from one floor to another the stairs should not be continuous. The rest that comes from a landing is worth many times the disadvantages, not to speak of the economy of room and the check in case of fall. As has been indicated, the rooms should never be located in a third or fourth story. The custom of locating a school hall or audience room in one of these higher stories is also objectionable. School buildings should and must be so constructed as to reduce the climbing of stairs to a minimum. The lighting of the school room should be ample. The window space should never be less than one-fourth of the floor space, but of course this ratio is subject to the surroundings of the building. Forty per cent. is little enough in some localities. Then the lighting must be from two sides; these sides should be left and rear, but never left and right. In the reports on this subject of the schools in an adjoining state, 97 per cent. of the school rooms receive their light from both right and left—many from the rear also, and nearly ten per cent. from the front.

It is apparent that the many angles of light so given must cause the most deleterious effects on the eyes of the pupils. I would prefer a unilateral light from windows very large or so arranged in groups as to give admittance to a few broad bands of light rather than to many streams of light from numerous smaller openings. The color of the walls within the room deserves consideration. The old-time white wall is irritating to the eye, especially in cases of lymphatic and scrofulous tendencies. The walls and ceilings should be delicately tinted. Paper is objectionable. A hard surface, which can be readily washed and does not absorb floating disease germs, is to be recommended. Blackboards should be reduced in size to the actual necessities of use.

The ordinary school room should not exceed fourteen feet in height, nor contain more than nine hundred feet of floor space.

The room should be thirty-eight feet long and from twenty-five to twenty-eight feet wide. Greater dimensions are neither comfortable nor convenient. Forty pupils are enough for one room and never should the number exceed fifty. The floor should be of hard, polished wood, which absorbs little and is easily cleaned. The above proportions would give each pupil at least twenty square feet of floor space and 300 feet of air space.

Whatever may be the means of heating a building, the ventilation should be perfect. If by hot air, the furnace should be large, so as to heat by a large quantity of hot air, and also keep the temperature of the rooms from fluctuating. The temperature between the floor and the ceiling should never vary five degrees, nor should it differ greatly in different parts of the room. The furnace should be centrally located, so as to transmit heated air by flues in interior walls, and to walls of any given floor by flues of any given length.

Except in mild weather, the windows should not be opened for ventilations, as such openings give rise to dangerous draughts and do not remove the carbonic acid gas, which accumulates near the floor. The ventilation should be near the floor, which equalizes the temperature at all parts and heights of the room and removes all layers alike. Any system of ventilation that does not supply each pupil with 1500 cubic feet of fresh air per hour is bad indeed. Each should have 2000 cubic feet. This in a room of forty pupils would necessitate the pouring into the room of from 60,000 to 80.000 cubic feet of air per hour; with fifty pupils, 70,000 to 100,000 cubic feet would be required. Now, it is apparent that no natural flow of air over the furnace would be able to supply this enormous demand of each room, which would necessitate a change of air every ten or twelve minutes. Hence, mechanical means must be used to create a draught. There are many contrivances for doing this, but the most economical is by conducting all the waste air through the floor space or chutes to a ventilating stack, in which a powerful ascending current or suction is created by heat, either by the smokestack passing through the centre of the ventilating shaft, or from gas burners, or other means. At Elmira, New York, some years ago, the shaft opened into a room in the garret, where a stove caused a suction from below. But this plan is not so good or economical as that which I have mentioned, and now in successful operation in the Sidney schools and elsewhere, by which is utilized the otherwise wasted heat of the smokestack in producing the desired suction from the rooms. The greatest care, however, must be exercised in making air-tight all the passages through which the air is to travel. Even the porous nature of brick requires a hard finish of plas-