

to the branch tithing payers, but they are more than liberal in their treatment of the traveling Elders, who are always sure of a hearty welcome when they come to town. A wonderful spirit of harmony prevails, and at many of the meetings the gifts of the Spirit are manifested. There are a few professed Mormons in Pueblo who have not yet connected themselves with the branch. It seems that their principal objection to uniting with the Saints, lies in the fact that they are not yet converted to the law of tithing. The branch is constantly recruited by Saints who come here from other settlements. Much interest also has been manifested by outsiders in studying the principles of the Gospel, and we have every assurance of several baptisms within a short time.

As a rule, the traveling Elders have been kindly received in the counties and cities where they have been appointed to labor. Not only have entertainments been provided for them; but school-houses and halls have been placed at their disposal, and the first sermon has almost invariably elicited an invitation to preach again. The field has been partially canvassed by missionaries of the Josephite church, and we have found a few of this persuasion on our travels. Series of meetings have been held in the Arkansas valley, along the St. Charles, in the valleys of the Wet mountains, and along Beaver creek.

During the present week, Elders Davis and Smith are holding a series of meetings in Florence, one of the busiest and most prosperous towns of the state. They canvassed the city without opposition, and through the liberality of some of the citizens, a large hall with electric light, was placed at their disposal for a week, without expense to them. Wherever our Elders travel they make many friends, and are especially blessed in their endeavors to allay the prejudice that heretofore has existed in the minds of some, concerning their neighbors in the West.

The Elders in the South Colorado conference, with their assignments, are as follows: President John E. Woolley and George A. Campbell, at large.

J. H. Grant Jr. and Charles Maun, Huerfano county.

M. C. Davis and L. J. Smith, Fremont county.

W. M. Wolfe and J. L. Egan, Custer and Pueblo counties.

The work is opening wonderfully, and there is a great demand for all of our Church publications. Instead of eight Elders, twenty are needed in this conference alone. The counties of Las Animas, Baca, Otero, Powers and Kiowa have not yet been visited.

On Sunday last, Elder J. W. Taylor visited Mannassa, in the San Luis valley, for the purpose of organizing a new conference, to conduct missionary labors in connection with the Saints of that valley. Accompanying him were Elders W. C. Clive, David Mann, H. A. White, H. S. Ensign and Fred Graham. Of the results of this visit we have not yet heard.

WALTER M. WOLFE.

#### SCIENTIFIC MISCELLANY.

Common errors resulting from the germ theory of disease were pointed out by Professor Liebreich at the recent German Congress of Internal Medicine. Medical men have carefully studied the substances capable of destroying the

bacteria, but it is essential to consider the cellular elements of the organism, and to avoid the error of concentrating attention entirely on microbes that often are not the primary cause of disease but have developed to an unusual extent through a lowering of vitality. The bacillus of tubercle, for instance, is found in healthy lungs, its development assuming the character of a disease only after the vitality of the pulmonary cells has been impaired. Professor Liebreich is of opinion that Koch's new anti-tuberculin will not be more successful than the former preparation; and states that while Behring's diphtheria antitoxin has been very favorably reported on, there are many competent observers who question its benefit. Tetanus antitoxin he pronounces useless.

The phosphorescent lamp on which Puluj, an Austrian physicist, has been at work for many years has a bulb much like that of the ordinary incandescent lamp, with electrodes of aluminum wire extending directly through the wall of the bulb. The negative pole terminates in a small disc. A small square sheet of mica, coated with sulphide of calcium, hangs from the lamp globe, and faces the disc. When either one or both poles are connected to an induction coil or plate electric machine, a stream of radiant electricity is reflected from the disc to the mica, causing the latter to glow with brilliant phosphorescence.

Some unfortunates, we are told by M. Philippe Tissie, are "born tired" in a literal sense. The condition is one of nervous debility transmitted by a mother to her offspring as a result of her own fatigue or exhaustion—a kind of poisoning of the child through the vitiated blood of the parent.

The origin of life must long continue a tempting subject for speculation. A Philadelphia investigator, Mr. Charles Morris, contends that the conditions favoring the development of organic material were transitory, and no longer exists, such material having arisen from a vitally active stage of inorganic chemistry. There must have been a time in the earth's history, he reasons, when chemical inactivity prevailed on account of high temperature and unfavorable physical conditions. Chemical activity arose and increased as the heated ocean was formed and changed the first simple substances into compounds of gradually growing variety and volume. Many resulting complex minerals were probably deposited as rock formations. The ocean having deepened and freed itself from foreign material, inorganic chemical activity gradually diminished until it has now practically ceased, oxidation having reduced nearly all substances to a state of chemical fixity. With the cooling of the primeval ocean and the increase of sunshine, came organic chemical activity. The material had been prepared in air and water, and may have had its origin in an early reaction between carbon dioxide and the elements of water, yielding hydrocarbons and subsequently between these and nitrogen, yielding the far more complex albuminous compounds. The complexity of mineral molecules doubtless increased under conditions restraining the activity of oxygen. Seed forms of organic substance—simple carbon com-

pounds—may have first appeared, and these would serve as the basis of gradually increasing complexity of molecules through a possibly long-continued process of deoxidation and formation of higher carbon and nitrogen compounds until true organic matter appeared, and the chemistry of life had begun.

The microbes of fevers may be scattered, Professor Charles Tichbore believes, in dew from sewers. As the sewer water is usually two or three degrees warmer than the cold air of certain hours of the night, the watery vapor rising through traps may be frequently condensed, when each particle of dew is liable to become a raft on which microbes may be carried for miles, to be finally deposited wherever the dew is dissipated—perhaps in a dwelling reached through a warm shaft.

An International Scientific Association was proposed at the meeting of the British Association in Canada in 1884, and it is now suggested that the year 1,900, would be an appropriate time to organize such a society.

From an exhaustive study of cave debris near the Rhine, Dr. Jacob Nuesch concludes that this record of the human occupation of Switzerland extend back about 28,000 years. Traces of man and his clipped stone industries are found with the oldest animal remains, which belong to post-glacial time and a sub-arctic climate. This period of man and animals lasted about 8,000 years. Then followed a period of 8,000, to 12,000 years which seem to have been without man and characterized by a gradual change of animal life to modern types, and this was succeeded in turn by the lake dwelling and polished stone period of about 4,000 years, which came to an end with the introduction of bronze about 4,000 years ago. It is probable that man inhabited milder parts of Europe long before the Alpine glaciers had melted sufficiently to permit his occupation of Switzerland.

A Breslau surgeon, Professor Mikuliez, wears gloves of fine thread in performing operations, and declares that this not only causes no inconvenience or difficulty but makes it easier to hold the tissues. The purpose of the gloves is to reduce the chances of introducing troublesome germs. Several changes of gloves are necessary in long operations, and each pair is made thoroughly aseptic in steam, while the hands are washed and disinfected in the usual way. A further recommendation is the use of a respirator of fine muslin as a safeguard against mouth bacteria.

Among equine dwarfs the smallest is claimed to be a pony reared by Marchese Carcano, a horse fancier of Lombardy. It is said to stand only six hands, or 24 inches, high, which the Shetlands are seldom under eight hands. The owner has a theory that small horses will return a greater amount of work than large horses for the same expense in feeding.

With the August house fly making himself altogether too free and easy, it is well to know that he has no liking for sassafras. Bunches of this odoriferous shrub, hung in the kitchen windows, or oil of sassafras, wisely distributed, are said to deter the coming, and speed the parting, with this "pestilential fellow."