or to written orders. In tests carried out in this manner, a false reaction with the unparalyzed limb is due to a motor apraxia and not to any failure to understand. Sometime an apraxic patient may persist in repeating the same action to different requests, in the same manner that an aphasic patient will continually repeat the same word. This perseveration of reactions is often so misleading that it is very different to determine if the requests were understood by the patient at all.

At the beginning of an examination for motor apraxia a few general tests will frequently demonstrate its presence or absence. If the condition is found present, it then becomes necessary to proceed through the entire clinical schema for examination. Even a partial apraxia or an apraxia for certain limited actions or muscle groups is of decided diagnostic and localizing value.

Clinical Department.

SOLUBLE SILVER OXIDE. ITS USE IN MEDICINE. A PROVISIONAL NOTICE.

BY THEODORE WILLIAM SCHAEFER, M.D., KANSAS CITY, MO.

It is a fact not generally known among physicians, pharmacists and even chemists that silver oxide is sufficiently soluble in water. During the summer of 1896, when the writer held the professorship of chemistry at the University Medical College, Kansas City, Mo., he experimented with a large number of salts belonging to the rare earths and heavy metals, searching in vain for a reliable remedy that would have a beneficial influence over gonorrhea. He experimented with silver oxide and hydroxide. Silver hydroxide, occurring as a whitish precipitate, is not stable at ordinary temperatures, turning immediately dark, as it is transformed into normal silver oxide, Ag_2O , with loss of water. This decomposition, however, is only complete at 100°C . As just stated, at all ordinary temperatures, argentic or silver hydroxide loses water, forming a black silver oxide:

When experimenting with silver hydroxide the aim of the writer was to obtain a *soluble preparation of silver entirely free from an acid radical*! Most of the silver salts contain the anions of acids, some of which are quite corrosive to the tissues. Silver hydroxide is prepared when an alcoholic solution of potassium hydroxide (caustic potash) is added to an alcoholic solution of silver nitrate at a low temperature, say, about -40°C . Silver oxide is soluble in much *distilled water*. The writer adds silver oxide to pure, distilled water, shaking the mixture frequently and thoroughly, after letting it stand for some time, and then percolating it through a wad of asbestos in a percolator. About 1 gm. of silver oxide is soluble in 3 liters of *distilled water*, forming a perfectly transparent and quite stable solution of silver hydroxide, according to the following equation:

This solution of silver hydroxide has a strongly metallic taste, and is, like thallium hydroxide, strongly alkaline, and precipitates from many metallic salts the oxides and hydroxides of the respective metals, and decomposes easily a solution of sodium chloride with the formation of sodium hydroxide (caustic soda) and insoluble silver chloride:

Silver oxide is for this reason employed by the chemist in his experimental researches for the separation of the most powerful bases (e. g., the ammonium bases) from their halogen combinations.

On the principle of decomposition by contact (catalysis), silver oxide reacts upon hydrogen-dioxide, with the following result:

Metallic silver is liberated, with copious effervescence of oxygen and liberation of heat (Bayer). Chemically, silver hydroxide is a strong base, its salts not being hydrolyzed by water. In many respects it resembles the alkalies. A solution of silver hydroxide contains silver and hydroxyl ions. This fact is of importance to the student of pharmacodynamics. The silver ion is emphatically monovalent, combining with the anions of acids and forming salts of the general type: AgCl , AgNO_3 , etc.

It is also of interest to note that when atoms of silver pass over into ions of silver a large amount of heat is absorbed (H. C. Jones). We call this reaction endothermic.

No doubt this preparation of soluble silver will meet many of the indications that are met by the employment of the other salts of the metal.

One advantage over the ordinary salts of silver, like that of the nitrate, for instance, is that this preparation of soluble silver *does not contain an acid* to form a salt.

It seems possible that the amount of silver hydroxide in solution may be increased by appropriate processes of evaporation.

This form of a silver preparation is suggested to those who have faith in the therapeutic efficacy of silver in its various combinations.

A CASE OF SYPHILIS TREATED BY INUNCTION OF MERCURY RELATED IN THE CESTA ROMANORUM WHICH WAS FIRST PRINTED IN 1473.

BY CAROLUS M. COBB, M.D., BOSTON.

THE collection of stories which is known as the *Gesta Romanorum* is undoubtedly of very ancient origin. Oriental, legendary and classical fables, heightened by circumstances of a strong romantic cast, form the basis of this singular composition. The stories had probably been told for hundreds of years before they were gathered into manuscript form. The date of the first manuscript is uncertain, but Herr Oesterly is of the opinion that