

**SIR SAMUEL BAKER'S EXPEDITION.**

Sir Samuel Baker, who was commissioned by the present enlightened Khedive of Egypt to proceed into the interior of Africa and suppress the slave trade of that immense wilderness which lies south of the Khedive's territory, has recently published an interesting and valuable book of travels. In describing his journey up the White Nile, he states that he had European vegetables of all kinds. "Having cleared and grubbed up a portion of the forest, we quickly established gardens. The English quarter was particularly neat. The various plots were separated by fences, and the ground was under cultivation for about two acres, extending to the margin of the river. I did not build a house for myself, as we preferred our comfortable barge, which was moored alongside the garden, from the entrance of which a walk led to a couple of large mimosas, that formed my public divan, where all visitors were received. In a short time we had above ground sweet melons, watermelons, pumpkins, cabbages, tomatoes, cauliflowers, beetroot, parsley, lettuce, celery, etc.; but all the peas and beans, and a very choice selection of maize, that I had received from England, were destroyed during the voyage. Against my express orders the box had been hermetically sealed, and the vitality of the larger seeds was gone."

We select an engraving from this interesting book, in which the gigantic aquatic vegetation of the district is well shown, together with the curious rig of the boats used for inland navigation in Africa, of which a yard of immense length, made of one cane stalk, is the distinguishing feature.

**THE GREAT WELL AT PROSPECT PARK, BROOKLYN.**

The Brooklyn Park Commission have provided, for the needs of the beautiful pleasure ground, a supply of water which enables them to be independent of the Ridgewood water, the yield of which is already well taxed in furnishing the city, with a prospect of a much larger demand in the immediate future. The well is situated under the shadow of Look-Out Hill, the highest ground in the park, on the summit of which a reservoir, 175 feet above the surface, has been constructed.

We give herewith a view of the upper part of the well, by which its ample proportions may be well conceived. Three quarters of a million gallons of water daily flow into the well, to be pumped, by the engine on the platform shown in our engraving, up to the distributing reservoir above described. It will be seen that the well is not, as it is sometimes called, an artesian well, and differs from the ordinary well only in its great size. The water flows horizontally, through pervious soil, till it reaches the intercepting drains, four of which are shown in the engraving (which we select from the *Christian Weekly*), delivering their water into the well. The structure is surrounded by a skylight, and access to the spiral staircase is found on walking into the engineer's office, shown on the left hand of our engraving, immediately over the engine.

**The Latest Artificial Butter Process.**

*La Nature*, of recent date, contains a description of a new artificial butter manufacturing process, the invention of M. Mège-Mouriès, which is being practised in Paris. A comparison of the details with those of the compounding of the oleo-margarin butter, made in this city and not long ago fully described and illustrated in these columns, shows the operations to be identical up to the churning. At this point, the oleo-margarin process is to mix the oil prepared from the fat with one fifth its weight of sour milk, and churn in the ordinary way. M. Mouriès' mode of manufacture seems to be a closer copy of Nature. He adds to 110 pounds of the oil about 25 quarts of sweet milk, in which are dissolved the soluble portions of 1,500 grains of cow's udder. This last is very finely divided and macerated for some time previous to use. The mixture, after agitation, transforms itself first into a cream, and, after about two hours, into butter, from which the buttermilk is drained. It is then washed

and salted in the usual manner.

MM. Bondet and L'Hôte, two chemists who have analyzed the product, give the rather anomalous opinion that the artificial compound is more nearly real butter than the genuine article prepared from cream. It contains less water, and less animal substance apt to turn rancid, than natural butter.

The imitation, it is stated, is largely employed by dairymen in France for adulteration purposes. Its taste is not agreeable, as it savors strongly of the suet.

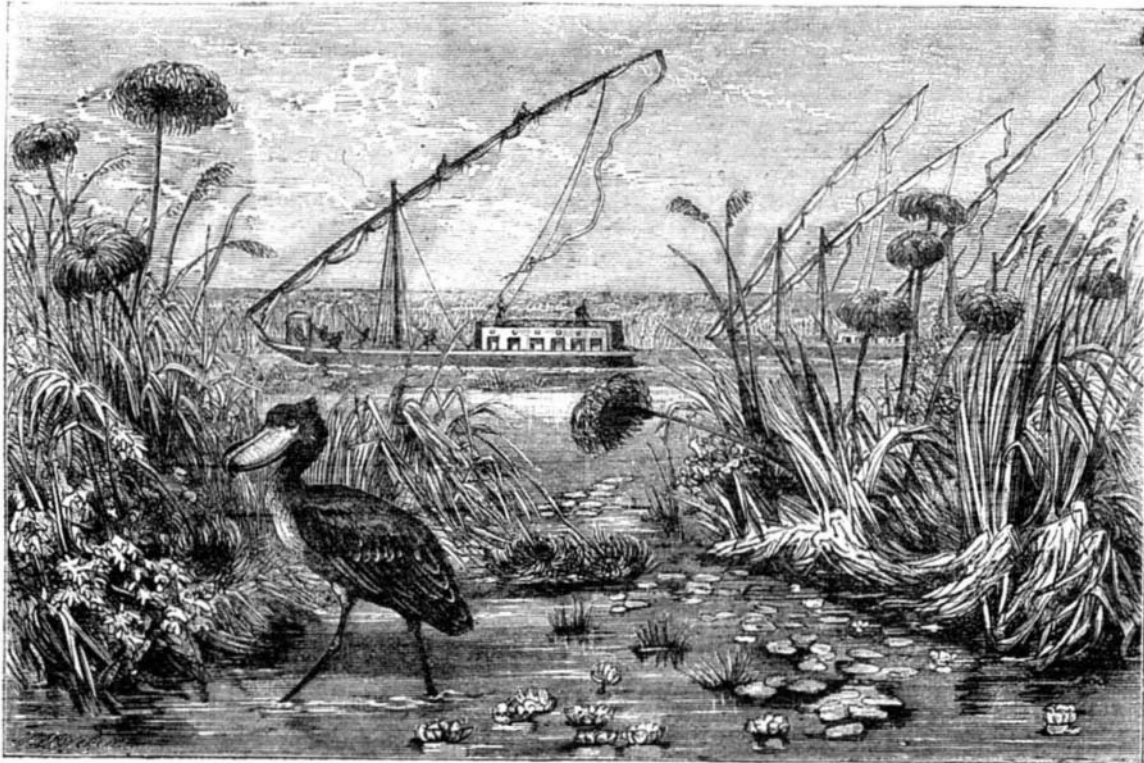
**The Slang of the Stock Exchange.**

Gamblers of every grade, says a contemporary, have their slang terms to convey to the initiated just what they mean; and however blind it may be to the uninitiated, it is perfectly intelligible to those possessed of the high civilization (?) necessary to "manipulate stocks." Four different forms of contracts are known under the general term of stock privileges. The "put" and "call" are single privileges. The "straddle" and "spread" are double privileges. A "put" is a contract giving the holder the right of delivering a certain amount of stock with in a definite time at a stipulated price. A "call" is exactly the reverse of a "put," being a contract giving the holder the right of calling for the stock instead of delivering it. A double privilege is a "put" and "call" on the same stock in one contract. When a double privilege is drawn at the market price of the stock, it is called a "straddle," and costs from two and a half to five per cent premium. But when drawn at a distance of from one to two and a half per cent above and below the market price, it is called a "spread," for which a fixed premium of two per cent is paid. The distance from the market at which a "spread" is drawn depends on the class of stock and the activity of the market.

**Unhealthy Plants.**

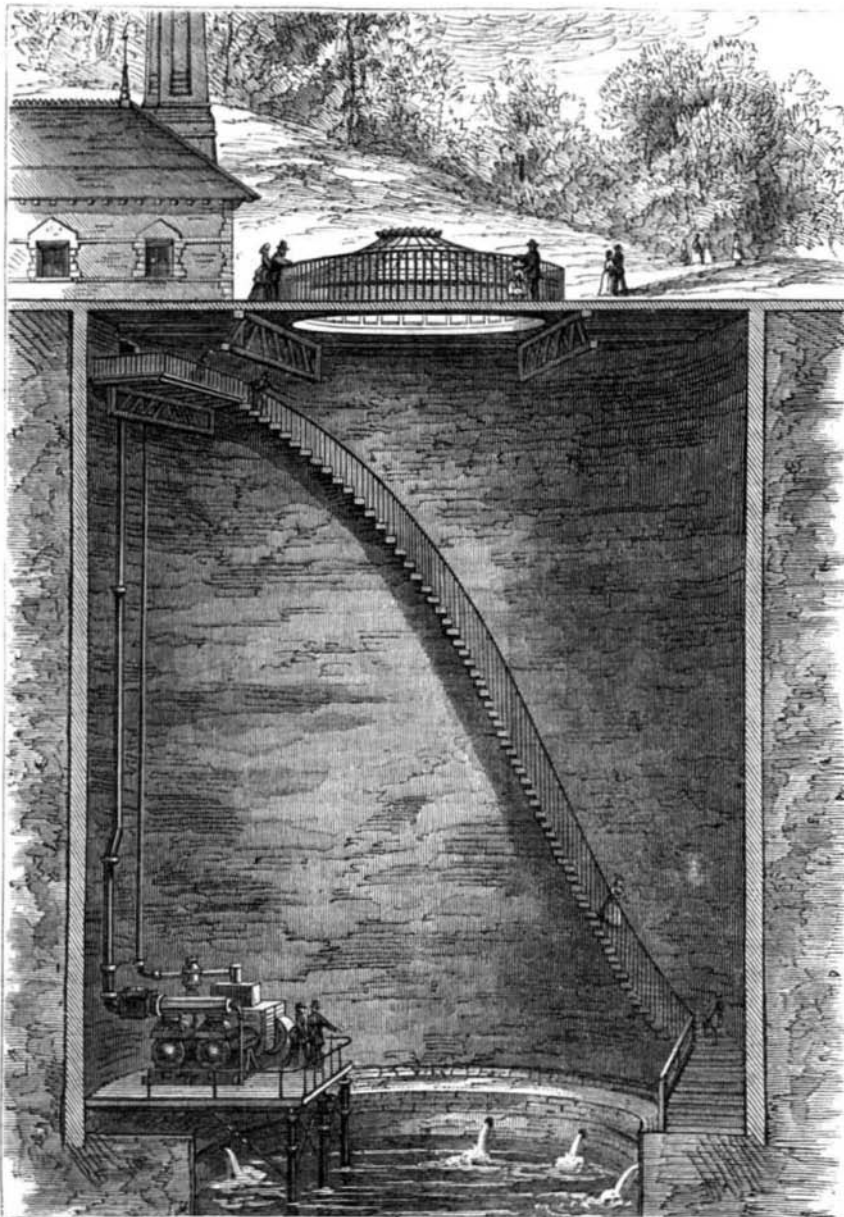
Whenever plants begin to drop their leaves, it is certain that their health has been injured either by over-potting, over-watering, over-heating, by too much cold, or by applying such stimulants as guano, or by some other means, having destroyed the fine rootlets by which the plant feeds, and induced disease that may lead to death. The case is not usually important enough to call in a "plant doctor," so the amateur begins to treat the patient, and the practice is in all probability not unlike that of many of our household physicians who apply a remedy that increases the disease. Having already destroyed the, so to speak, nutritive organs of the plant, the stomach is gorged with food by applying water, or with medicine by applying guano or some patent "plant food." Now the remedy is nearly akin to what is a good one when the animal digestion is deranged—give it no more food until it reacts. We must then, if the roots of the plant have been injured from any of the above named causes, let the soil in which it is potted become nearly dry; then remove the plant from the pot, take the ball of soil in which the roots have been enveloped, and crush it between the hands just enough to allow all the sour outer crust of the ball of earth to be shaken off; then re-pot in rather dry soil (composed of any fresh soil mixed with equal bulk of leaf mold or street sweepings), using a new flower pot, or having thoroughly washed the old one, so that the moisture can freely evaporate through the pores. Be careful not to over-feed the sick plant. Let the pot be only large enough to admit of not more than an inch of soil between the pot and ball of roots. After re-potting, give it water enough to settle the soil, and do not apply any more until the plant has begun to grow, unless, indeed, the atmosphere is so dry that the moisture has entirely evaporated from the soil; then, of course, water must be given, or the patient may die from the opposite cause—starvation. The danger to be avoided is in all probability that which brought on the sickness, namely, saturation of the soil by too much water. Other causes may induce sickness to plants, such as an escape of gas in the apartment, or smoke from a flue in the greenhouse; but in all cases, when the leaves fall from a plant, withhold water, and, if there is reason to believe that the soil has been poisoned by gas or soddened with moisture, shake it from the roots as before advised, and re-pot in a fresh flower pot. Many years ago, when I used smoke flues in my greenhouses, some kindling wood, carelessly thrown on the top of one of them, ignited, and the smoke caused the leaves of every plant to drop. There weresome 3,000 plants, mostly tea roses, in the greenhouse; it would have been too much of a job to re-pot all, but, by withholding water for some ten days, until they started a new growth again, very few of this large number of plants were injured.

—Peter Henderson.



**VEGETATION ON THE BANKS OF THE WHITE NILE.**

In this connection we may remark that there is a very simple and sure way of distinguishing genuine cow butter from the oleo-margarin mixture. It consists in dissolving a small portion of the suspected substance in ether, and evaporating to dryness by the application of a gentle heat. The residue has the true butter smell if genuine, which may be greatly intensified by cooking. If artificial, however, the deposit has



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the easily recognizable odor of suet. A complete description of a test for artificial butter, by Mr. John Horsley, F.C.S., by the use of methylated ether, was given on page 370 of our volume XXXI.