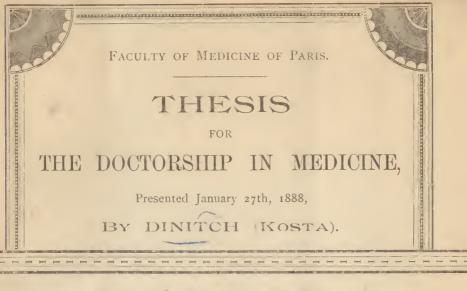
# DINITCH. (K)



# KEPHIR;

# MILK CHAMPAGNE OF CAUCASUS.



·

#### FACULTY OF MEDICINE OF PARIS.

YEAR, 1888.

No.....

# THESIS

#### FOR

# THE DOCTORSHIP IN MEDICINE,

Presented and Sustained the 27th January, 1888, at 1 o'clock.

#### BY DINITCH (KOSTA),

Born at Brounitza (Siberia), the 20th August, 1854.

# THE KEPHIR,

#### OR

### MILK CHAMPAGNE OF CAUCASUS.

ORIGIN, PHYSIOLOGICAL ACTION, AND THERAPEUTIC IMPORTANCE.

President : M. HAYEM (Professor). Judges : Mess. LANDOUZY, BLANCHARD), Fellows of the University,

NEW YORK. WILLLIAM L. DOWNS, STEAM PRINTER No. 1037 Third Avenue.

#### 1888.



#### [TRANSLATION.]

#### ABSTRACT FROM THE

## THESIS OF DR. DINITCH.

#### PARIS, 1888.

**K**<sup>EPHIR</sup> is the product of a peculiar fermentation of cow's milk. It was first used in the Caucasus, and has become more generally known within the past twenty years.

Good Kephir must have the color of milk, and the consistency of cream, without sediment; it should be effervescent like beer, or rather, like champagne, with a sweetish sour taste.

The prickling sensation on the tongue is caused by the carbonic acid contained in Kephir.

The following are analyses of Kephir, one made by a Russian pharmacist, M. Touschinsky, the other by M. Sonnerat, of Paris.

ANALYSIS BY TOUSCHINSKY.

SKIMMED MILK.

DENSITY, 1.028

	Cow's Milk.	KEPHIR, 2 DAYS OLD, DENSITY, 1.026
Albuminoids	. 48	38.000
Fats	38	20.000
Milk-Sugar	41	26.925
Lactic Acid	00	9.000
Alcohol	00	8.000
Water and Salts	873	904.975
-	1000	1000.000

	Cow's Milk.	KEPHIR FROM SAME, NUMBER 3.
Solid Matters	118.30	87.00
Butter	26.60	24.70
Casein	31.60	31.00
Milk-Sugar	41.22	14.05
Peptones	0.00	0.21
Alcohol	0.00	0.12
Lactic Acid	0.00	7.60
Water	783.00	883.00
	1000.72	

#### ANALYSIS BY SONNERAT. Milk Almost Completely Skimmed. Density, 1.030. Temp. +15°C.

From the analyses of Touschinsky and Sonnerat it would appear, that through the action of the peculiar ferment of Kephir, two different kinds of fermentation take place, namely: alcoholic fermentation, and lacteous fermentation. We say "two kinds of fermentation," because it is known that ordinary yeast cannot transform milk-sugar unless the same is first changed into fermentable sugar. On the other hand the analyses show, that in Kephir the lactose has been transformed into alcohol, carbonic acid and lactic acid.

Whatever may be the nature and cause of the fermentation of Kephir, so much appears certain, that three transformations or chemical processes take place, viz:

*First.* The alcoholic fermentation of part of the milk-sugar, which is transformed into alcohol and carbonic acid.

*Second*. Lacteous fermentation of another part, that is to say, transformation of sugar into lactic acid.

Besides these three important processes, alcoholic fermentation is always accompanied by the formation, in small quantities, of secondary products, such as glycerine, succinic acid, butyric acid, and acetic acid.

According to the investigations of Biel, of St. Petersburg,\* and of Dr. Schmidt, of Moscow, milk from different animals

\* Dr. Biel Eiweisstoffe des Kephirs, Saint-Petersbourg. Med. Woch., 1885, p. 139.

coagulate differently. In cow's milk, the coagulated casein forms a single, comparatively hard, compact lump, while human milk, when coagulated, forms small, delicate flakes, which are soft and more fluid. In Kephir the casein is in thin flakes, which gather in a thick layer, rise to the top of the milk, and and are mostly dissolved by agitation. In three-days' Kephir this layer is much more fluid than in that of two days, and if fermentation be allowed to continue for four or five days, it will be found that the liquid has again become as fluid as milk. Therefore, there can be no doubt, that through the action of the ferment, the casein undergoes a liquefaction analagous to the one it undergoes through the action of certain digestive ferments, that is peptonization. According to Biel, the difference between casein of Kephir and casein of milk is, that the latter, after being once precipitated and then re-dissolved by the addition of one per cent. of soda under pressure, is again precipitated by acetic acid, while casein of Kephir treated in the same way remains in solution in spite of the combined action of gastric juice and a temperature of 104° F. This, Dr. Schmidt says, is caused by the presence in this milk of different quantities of a peculiar albuminous substance, which Dr. Kuehne has called hemialbuminose, and which is found in all milk, although in variable quantities. It is known that hemialbuminose is an intermediate product of the digestion of albumen, before its transformation into peptone, which is the only form in which albuminous substances can be absorbed by the organism. In the presence of a certain quantity of acid hemialbuminose does not coagulate, but remains in solution, so that the more of it is contained in milk, the smaller and softer is the clot of casein.

Duclaux\* states, that nine-tenths of the casein of milk is not in solution, but in mucous suspension. To become useful and nutritious, this casein must be rendered soluble. In the stomach digestion of casein is always preceded by coagulation, whereby almost all the liquid part is eliminated. The liquefaction of casein, the digestion of milk, is due to a secretion from the pancreas.In Kephir, this liquefaction is effected by the peculiar ferment, and the casein of the milk is thus made digestible. On this fact is based the great curative value of Kephir. It is almost impossible for a child's stomach to digest cow's milk, because by the gastric juice milk is at once transformed into a voluminous, very compact casein clot, which cannot be reduced

\* Beitræge zur Kenntniss der Kuhmilch, Von Kirchner, Dresden, 1877.

by the weak walls of a child's stomach, and which the insufficient quantity of digestive juices cannot transform first into hemialbuminose and then into peptone. This makes it impossible for the organism to absorb it. With Kephir it is entirely different, a great part of the albuminous substances being already transformed into hemialbuminose, partly into peptone; what remains does not coagulate under the action of the peculiar ferment, except in such small, light flakes as require no effort by the stomach for disintegration and for thus preparing them for direct absorption.

The stomach of weak persons, reduced by sickness of any kind, may be compared to the stomach of a child. Like the latter it requires food which, owing to its chemical and physical properties, may be digested without great exertion.

The physiological action of Kephir is due to the presence of lactic acid, alcohol, carbonic acid and peptone.

Lactic acid is one of the free acids in the stomach, and to it the gastric juice owes its acidity. It has an important effect on digestion. Carbonic acid causes a 'prickling, pleasant taste on the tongue, and in the stomach a pleasant feeling of warmth. It acts on the membranes of the stomach as an anæsthetic, and excites the secretion of gastric juice. In stimulating the capillary vessels, it accelerates the peristaltic motion of the intestines.

Alcohol, which is found in considerable quantity in Kephir, acts very favorably on the circulation of blood and on the nervous system. It retards the chemical processes of disintegration in consumptive diseases, and consequently permits the accumulation in the body of nutritive substances. This accounts for the rapid gain in weight by the continued use of Kephir.

As to the peptone contained in Kephir, it is hardly necessary to repeat, that it has the effect of stimulating digestion and of hastening the same as much as possible.

#### THERAPEUTIC SYMPTOMS AND VALUE OF KEPHIR.

From all that has been said about the chemical composition and physiological action of Kephir, its therapeutic symptoms are readily understood. Thorough experiments, and numerous careful observations, have established the fact, that Kephir is the best of all known nutriments. All the authors, who have taken pains to study it, are unanimous in declaring it the most readily digested and most strengthing food.

Dujardin-Beaumetz,\* who was the first to introduce Kephir • Dujardin-Baumetz. Lecons de Clinique therapeutique iv. Ed., 1855. p. 299, 300, 301. at the Cochin Hospital, states, that it is a powerful tonic, which in particular facilitates the commencement of a milk treatment in the case of a person used to alcoholic beverages, and affected with catarrh of the stomach, without suddenly depriving him of alcohol, which deprivation, as is known, may sometimes cause serious symptoms. It is in one word the useful means of transition from the habitual diet of the drunkard to an exclusive milk diet.

Professor Lepine, of Lyons, says that he has employed Kephir with success in several cases of ulcerated stomach. The patients preferred it to ordinary milk, and stated that by its use the pains in the stomach were alleviated. Other patients, suffering from catarrh or enlargement of the stomach, have been alternately treated with milk of good quality and with Kephir. They all gave preference to the latter. One of them, says the learned professor, could not bear milk, while Kephir had a very satisfactory effect.

Professor Huguenin, of Zürich, says that persons with diseased lungs usually bear Kephir well, and, in case of the commencement of local improvement of the affected organ, appear under this treatment to gain in weight more rapidly than by any other kind of food. Since the introduction of Kephir many almost insurmountable obstacles to the nutrition of such patients have disappeared. I have full faith in this remedy, especially for lung diseases, and I consider it a valuable addition to the limited number of really effective remedies.

The same doctor says: I have made a series of experiments with Kephir on diseases of the stomach. Amongst others, two patients suffering from enlargement of the stomach were, after the use of Kephir, enabled to absorb any nourishment whatever. In the case of cancer of the stomach, Kephir has proved to be the best remedy to prescribe.

Professor Monti,\* of Vienna, states that he has had great success by the use of Kephir in his polyclinic for children at Vienna, as well as in his private practice. According to him, Kephir is indicated in the cases of anæmia, of emaciation caused by heavy and consumptive fevers, of chronic catarrh of the stomach, catarrh of the respiratory passages, and chronic pneumonia. In all of these cases he has used Kephir No. 2, rarely No. 3. He states that children get rapidly accustomed to it, and vomit but seldom; the natural discharges are augmented and the weight of the body soon increased.

\* Professor Monti. Wein M.d. Allge. Ztg., 1857, No. 22 and 23.

Dr. H. Weiss, of Vienna,\* has made an interesting communication on Kephir to the Medical College of Vienna. He asserts that in chronic affections of the stomach he has obtained remarkable results. In "Ulcus ventriculi," he says, he knows of no better remedy. This is also the opinion of Prof. Lepine.

Dr. Stern and Dr. Lowenstein, of Berlin, have lectured on Kephir before the Medical Society—section for internal treatment—reporting interesting observations as to complete cure, as well as to rapid improvement, in cases of chronic catarrh of the stomach, respiratory passages, etc.

Professor O. Wyss, of Zurich, has made experiments with Kephir on several patients with the following results: The experiments were continued about six months, about one thousand bottles having been used, generally with success. In most cases an increased appetite was observed, also alleviation of pains, improved sleep, a general condition of well-feeling, and gain in the wieght of the body. In one subject the blood globules increased from 3,420,000 to 4,448,000 after 35 days' treatment, and the same patient, suffering from cancer of the stomach, had his weight increased 12 pounds during the same time.

In Russia, Kephir treatment has attained such a reputation that establishments and sanitary stations have been founded for Kephir treatment. In the Caucasus, where it first originated, its use has become so general, that it has spread over the whole of Russia, from south to north. The first establishments were founded at Stavropol, Wladikavkas and Piatigorsk; then at Ialta (Crimea), then at Charkoff, Moscow and St. Petersburg.

Messrs. Dimitrieff and Podvysotsky, to whom we owe two interesting papers on Kephir, have established the first rules for its use in therapeutics. They express the same opinion on Kephir as the authorities already cited. At Ialta, where every year a large number are treated by Kephir, Mr. Dimitrieff has observed on almost all the patients a rapid increase of the weight of the body, and as secondary effects, an increase of the secretion of urine, regular movement of the bowels, the excretions of the respiratory organs less dense, the urine clear without smell and without sediment.

In France, Kephir has only been known for a short time, and Dr. Dujardin-Beaumetz has first experimented with it in the Clinic of the Cochin Hospital.

\* Dr. H. Weiss, Wien. Med. Wochensch. No. 16, p. 574, and No. 17, p. 618.

As reoprted in a thesis by Dr. Saillet,\* one of the scholars of Dr. Dujardin-Beaumetz, Kephir gives excellent results in affections of the stomach, dyspepsia, gastritis and gastralgy, as well as in chronic phtisis, stopping vomiting, reducing cough and stimulating expectoration.

At the hospital Saint-Antoine, in cases of green infantile diarrhœa, Prof. Hayem presribed lactic acid according to the following formula :-

Water											
Sirup of Sugar								•		20	6.6
Lactic Acid								•		2	66

up to 20 teaspoonfuls a day. Vomiting and diarrhœa were almost always stopped.

Kephir, in suppressing diarrhœa and vomiting of children, appears to operate like lactic acid.

At the Hospital Saint-Antoine, Professor Hayem has also obtained excellent results in a case of cancer of the stomach, an an account of which is given below.

#### HOW TO USE KEPHIR.

We have already stated that three kinds of Kephir are used : Mild, No. 1; Medium, No. 2; and Strong, No. 3; according to the degree of fermentation. All those who have used it agree as to the purgative effect of the Mild Kephir, and the constipating effect of the strong Kephir. As to the dose to be taken, it must be determined by the physician according to the nature of the case and the constitution of the patient. From what we have stated above regarding its therapeutical and physiological action, it is readily seen when Kephir is indicated. We think there is no counter indication, if it be not the taste of the patient and an insurmountable aversion for Kephir. This aversion may however be overcome, for we have generally observed, that although there may be a repugnance at first, one will soon become accustomed to it, and then even like Kephir, in consequence of its slightly piquant, sourish and refreshing taste. Should however the aversion continue, we would advise the addition of two teaspoonfuls of powdered sugar to a glass of Kephir, for we have found that in this way it agrees with persons who could not take it without sugar. To make it agreeable we also advise a change of the strength of Kephir, as we

<sup>\*</sup> Dr. Saillet, Laits fermentes, These de Paris, 1886.

have seen persons who could not take mild Kephir, but with whom strong Kephir did agree, and *vice versa*.

Dr. Dimitrieff has established certain rules for the use of Kephir. According to him, the duration of this cure can not be determined *a priori*, as Kephir is not a mineral water, the continued use of which might have bad consequences, but it ought to be continued for at least six or eight weeks. At the beginning he prescribes small doses, so that the patient may become accustomed to it, gradually he increases it up to five litres per day, and even more if it agrees with the patients. Only he recommends taking Kephir in small quantities at short intervals of time, so as to avoid the accumulation of too large quantities of liquid, and distension of the stomach by carbonic acid. However, there is no absolute rule as to doses, or the diet to be followed. The Kephir treatment is almost identical with milk treatment.

It may be asked then, why not be satisfied with milk? There is no better answer to this than what Prof. Lepine said: For the reason which induced man to transform grape juice into wine, in a word to introduce art in the preparation of food.

#### CONCLUSIONS.

First. Kephir is a fermented beverage made from cow's milk.

- Second. This beverage is produced by a peculiar fermentation caused by a fungus, which comes from the Caucasus, and which is the proper ferment for cow's milk.
- Third. The ferment consists of two elements: 1st, Yeast cells; 2d, Bacteries-dispora Caucasica of Kera.
- Fourth. Kephir is not a specific for a certain disease, but a tonic and restorative.
- *Fifth.* It is above all a nutriment, retaining all the nutritive qualities of milk, and containing besides, alcohol, lactic acid, carbonic acid and peptones.
- Sixth. It also acts as a powerful stimulant through the alcohol, the carbonic acid, and its other components, which incite the digestive processes, and without the least exertion of the organism, almost without digestive work, provide for the organism a considerable quantity of hemialbuminose, which is at once transformed into peptone.

#### OBSERVATION I.—By DR. IVANICHEVITCH.

Mrs. P-, Doctor of Medicine of the Faculty of Zürich, 24 years old, mother of two children, no hereditary dispositon for tuberculosis. Well up to the commencement of 1885. Towards the middle of the latter year she loses her appetite. A light, dry cough sets in, accompanied by spitting of blood, becoming more and more frequent. Emaciation makes rapid progress; remittent fever and ague; insomnia, night sweats. The patient decides to consult our instructor, who finds as follows: the left lung in pretty good condition; the top of the right lung affected; respiration weakened, expectoration dry. The expectoration is examined under a microscope, and elastic tissue found in great quantity. The ordinary treatment for such cases is followed by the patient with perseverance, without obtaining favorable results. In the month of May, 1886, I was called upon to take care of her case. I find her very weak, emaciated, with constant elevation of temperature in the evening; night sweats, diarrhœa and absolute want of appetite. Whatever the patient takes she throws up almost at once. Auscultation shows that on the left lung respiration is weakened, on the right it is likewise weakened, but breathing sometimes with a dry, creaking sound. I prescribe the following treatment:

Turpentine, 2 grammes per day; Antipyrine, a package of one gramme, morning and evening; Strong Kephir No. 3 as exclusive food. The vomiting, which troubled the patient, became less frequent, and ceased entirely on the third day. The patient takes the Kephir very well. I increase the quantity in such a manner that at the end of two weeks she takes 5 litres per day. The fever recedes from 38°.8 C. to 37°.6 C. (from IOI.8 F. to 99.6 F.) and as the expectoration diminishes, sleep comes back.

At the commencement of the month of June, 1886, I advise the patient to go to Switzerland, telling her how to prepare Kephir. At the end of the month of July I hear that in addition to the five litres of Kephir, which she takes each day, the patient eats with very good appetite meat, eggs, and vegetables. In October I see her, and she tells me she has gained six kilogrammes in four months. Auscultation shows a diminution of the respiratory noises, but no rattling. In 1887 the patient underwent a cure at Eux Bonnes, and to-day she has completely recovered.

#### OBSERVATION II.-By DR. IVANICHEVITCH.

Mrs. B-—, age 19 years, was in July, 1866, in the fifth month of pregnancy. The first pregnancy passed off well, but at the commencement of the second part she began to vomit, and this condition continued for five months, without anything being able to stop it, although the usual remedies for such cases were given.

When we saw her for the first time we found her terribly emaciated and hardly able to walk. I advised her to try Kephir, and prescribed for her the strongest No. 3, which contains the maximum quantity of carbonic acid and of lactic acid. At the end of a few days vomiting ceased completely as by magic, the appetite returned and pregnancy took its regular course. Since then she has gradually improved, and the last time we saw her she was very well.

#### OBSERVATION III.—By DR. IVANICHEVITCH.

Mr. H—, a wine merchant, a confirmed drunkard, consulted me about his absolute want of appetite. He said: "I have long been used to not eat anything, but I could at least drink, only I had some plegm in the morning. But for six weeks I cannot keep anything, and I suffer heavy pain in the pit of the stomach."

I put him on milk treatment. Six days afterwards he returned and complained that he could not bear milk. I advised Kephir so as to stop the vomiting, which, in fact, ceased after four days. As he had made up his mind to take care of himself, and to quit drinking, I prescribed for him Kephir No. 2. For five weeks he followed this treatment, taking daily from three to four litres of Kephir. Four months later I saw him again, and he was completely restored.

#### OBSERVATION IV .- By DR. IVANICHEVITCH.

Mrs. N—, consulted me about her 11 months old child, which I found in a state of advanced atrepsy, vomiting all the milk, and having continuously green diarrhea. I examined the mother's milk with the pioscope and found it very thin. I advised her to wean it and give it medium Kephir No. 2. For three months she had nourished exclusively on this fermented beverage. To-day the child, which is two years old, is a strong and pretty baby.

#### OBSERVATION V.-By Dr. GOUBERT.

Mrs. X—, 22 years old, albumen in the urine for two years; tuberculosis in the first degree. Pregnant for five months. From the commencement of pregnancy she was taken with vomiting. At first she vomited every two days, then every day, and sometimes several times a day. In spite of the treatment followed in the country, where she then lived, it was impossible to stop the vomiting. On her return to Paris she asked our attendance. As she could not retain any nourishment at the time we first saw her, it struck us to prescribe for her exclusively Kephir. We prescribed Kephir No. 2., advising from two to three glasses a day, to be taken in small draughts. Next day already we noticed a slight improvement, as she vomited but once during the day. Two or three days later we increased the dose of Kephir, and directed the use of one and one-half bottle to two bottles a day. By this treatment vomiting ceased altogether at the end of two weeks; the appetite returned, and the digestive functions were restored, so that the patient took food very well, while at the same time continuing the use of Kephir in the same proportion for one month. At present she eats and digests well. Pregnancy takes its course.

August 13th the condition of the child being despairing, I stopped all medicine and prescribed only Kephir, which she retained very well. Vomiting ceased at once; broncho-pneumonia passed to the stage of solution; diarrhœa was diminished and ceased completely, and, August 18th the child was convalescent. I saw this child again during the first days of September, it was completely cured.

#### OBSERVATION VI.-By DR. GOUBERT.

Mrs. X—, 33 years old, first child-birth. In consequence of heavy labors, with application of forceps, and fetid flux from puerpal septicæmia, she lost her appetite altogether. Lives in the country and passed an excellent pregnancy. We saw her two weeks after confinement, and found her in a condition of inconceivable weakness and emaciation. We prescribed Kephir No. 3, which on the first day caused some aversion owing to its acidity. At the end of a few days the same Kephir was not only retained and digested, but she took it even with some pleasure. The patient has commenced to take one large glass every hour, leaving off one hour before meals. The appetite returns gradually. The patient gradually takes more food, while continuing the use of Kephir for some time yet. -At the end of one month she has stopped using Kephir, and actually eats well.

In this case it appears Kephir has manifestly played a part in reviving the digestive functions of the stomach and returning appetite.

#### OBSERVATION VII.—By DR. RAIMONDI.

Published by the Medical Union No. 126, October, 1887.

GASTRIC ALCOHOLISM— S—, aged 54 years, driver, drunkard and affected with pleurisy on the right side, and gastric alcoholism. Depression of the chest, general condition bad, continual vomiting. The patient is put on exclusive Kephir treatment. Immediate improvement. Increase of Kephir up to three bottles a day. After twenty days the pleuritic effusion has disappeared, but the patient was taken with alcoholic paralysis. He gces to the department of Dujardin-Beaumetz, whence he leaves one month later cured.

#### OBSERVATION VIII.—By Dr. G. RUIMONDI.

Published by the Medial Union No. 126, Octover, 1887.

SIMPLE ULCER OF THE STOMACH; chloro-anæmia.—Miss B—, 21 years old, suffers in the stomach for two years. September 10th, vomiting becomes uninterrupted, none of the remedies used-ice, subcutaneous injections of morphine, etc.succeed in stopping it. We ordered a bottle of Kephir (medium dose) to be taken in twenty-four hours. Vomiting gradually diminished. The quantity of Kephir is gradually increased to three bottles a day. This day the patient is convalescent, and her stomach retains solid food, meat, bread, etc. Her general condition is good, and she is gaining strength.

#### OBSERVATION IX.—By Dr. DELARBORDE.

Published by the Medical Union No. 126, October, 1887.

August 8th, 1887, I was called to a child, M—, 30 months old, suffering for ten days from infantile diarrhœa and bronchopneumonia of the left wing of the lung. Temperature 40° C. 104° F.), intense dispnœ, bad and painful cough, swelling of the belly, copious diarrhœa, ungovernable vomits. Tonic drink of Peruvian bark, blisters, sulphate of quinine, milk with vichy water. General condition became worse, diarrhœa increased, milk was vomited or returned without change.

#### OBSERVATION X.—(Personal.)

Taken in the department of Professor Hayem, at the Saint-Antoine Hospital.

M. Tranchant, 45 years old, glass cutter, has for a long time been affected with cancer of the stomach. Blood vomit for more than three months. Threw up all kinds of food as soon as eaten. Even milk was not retained, and the patient threw it up in large clots. Having arrived at the last stage of exhaustion, he went to the department of Professor Hayem in an alarming condition.

From the time of entering the hospital, August 22d, up to December, 1887, his condition remained serious without notable improvement. Vomiting of food and blood continued in spite of the treatment. Pains in the epigastric cavity were intolerable. Toward December, 1887, Professor Hayem ordered Medium Kephir No. 2, one bottle a day, which the patient took for six days. At the end of this time the patient noticed that vomiting became less frequent. As the Kephir was well retained and appeared to relieve the patient, Dr. Hayem prescribed two bottles per day. After two weeks vomiting ceased altogether, the pains in the epigastric cavity were so much reduced that from being excruciating they were now very moderate. The appetite of the patient returned gradually, and sometimes he can take some light food besides the Kepfir which he takes. When we saw the patient the last time, January 7th, 1888, he said he was charmed with his condition, and expressed his desire to take one bottle more a day.

This observation is typical concerning the use of Kephir in case of cancer of the stomach. Kephir has proved superior to all other known remedies, stopping vomit, and thus enabling the patient to take and retain light food.

#### OBSERVATION XI.—(Personal.)

#### Taken in the ward of Dr. Lacombe, Bichat Hospital.

Miss Rosalie, 26 years old, of tuberculous parents. Her father and her mother died of tuberculosis. She has likewise been affected for two years by all the symptoms characteristic of tuberculosis. Last year she was admitted to the ward for incurables in the Lænnec Hospital where she remained for some time. Her health having somewhat improved she left the hospital to take a place as nurse at Bichat Hospital. We have seen her there, and she has told us that eight months ago she was so sick and weak that she could not stand up. Having completely lost appetite, she had become extremely thin. She complained besides of pains in the stomach and of diarrhœa, which would not stop, and to which she attributed the weakness and great emaciation.

Toward the month of August, 1887, without consulting anybody, she thought of trying Kephir. She commenced with one bottle No. 2. Observing that after five days her appetite gradually returned, she took two and afterward three bottles per day. Feeling constantly better, she continued taking Kephir No. 3 for one month, the dose being three bottles a day. At the end of three months of her employment she noticed that the digestive functions were completely restored, the gastric pains had disappeared, and diarrhœa had completely ceased. When we saw her on January 9th, 1888, she was in a flourishing condition, very contented and very cheerful. Her weight must have increased considerably, for we noticed she had become very stout. At present she does not take any more Kephir, for fear, as she says, of geittng too fat.

We considered it well to report this interesting observation, as Kephir in this case evidently has two effects; first, as nutriment, enabling the stomach to bear light food, and then as a tonic, stimulating and restoring the digestive organs.

#### OBSERVATION XII.--(Personal).

Miss M. S—, Rue Manberge, 48, called to consult us about the 15th of September, stating that for some time her general health had been very bad. She complained of want of appetite, of risings frequently accompanied by vomiting. She said she had become very thin, that besides she had the feeling of a ball rising from the gastric region towards the throat. We noticed that she was pale and anæmic. In the epigastric region pressure with the fingers causes pain. She tells me that this pain increases after taking food. In spite of all the tonics which she had tried, iron, quinine, bitter drops of Baume, Fowler's solution, Vichy water, her appetite had not returned. Having observed about the same symptoms on ourselves, and having experienced the good effect of Kephir, we did not hesitate to prescribe it, indicating weak Kephir No 1.

At first we prescribed for her one glass of Kephir one hour before each meal. When commencing its use she felt a certain aversion to it, owing to its peculiar taste, and she came near giving it up altogether. We informed her that we had been affected by the same complaint of the stomach, and that, in spite of the use of all kinds of medicines, we owed to Kephir alone the restoration of our digestive functions. She took our advice. We changed the Kephir, and in place of No. 1 we prescribed her No. 2, thinking it would agree with her better. We were, in fact, not deceived. Gradually she became so well used to it that she would even take it with pleasure. After five days already her condition had very much improved. From one glass we increased the dose to four glasses a day, and she stopped at this dose, having found that going beyond it would again cause aversion. Towards November 15th-that is to say, after having used Kephir for one month-the patient gave up using Kephir, as she did not need it any longer; her digestive functions being re-established and the appetite regained, the weight of the body increased one kilogramme. One month later she had again stomach ache, and without consulting us she again took Kephir, finding it did her good. At this time she is well, and she has recovered her plumpness.

#### OBSERVATION XIII.—By DR. G. RAIMONDI. Published in the Medical Union No. 126, October, 1887.

PULMONARY AND INTESTINAL TUBERCULOSIS.—Mrs. M. is confined to the bed for several months, has diarrhœa, dry cracking noise in the left lung, a tumor in the left side, which had been taken for an abscess of the broad ligament. In my opinion it is a case of mesenteric tuberculosis. The patient vomits all food. She is emaciated. All medicines were without effect. She is put on Kephir regime, first No. 3, then No. 2. Vomiting and diarrhœa cease, gradually the patient takes nourishment. At the end of two months later she leaves for the country in a satisfactory condition. L

