

Commends wood-pulp floors, which have no cracks, are soft to the feet, and are bad conductors of heat and sound, while their cost is considerably less than that of ordinary flooring. It is believed that such floors will prove very durable. The dried pulp, mixed with a little cement to add resistance to the floor, is transported in power, and after being made into a gelatinous mass is passed between rollers. The floors are painted to imitate oak or other wood.

Fine coal or slack coal has proved very effective in England as a filtering material for sewage. It seems to have as Prof. Bostock Hill has pointed out, a special power of removing the putrescent organic matter. The effluent is particularly bright, shows a marked diminution in the quantity of oxygen absorbed, and is perfectly free from odor. The interior of the filter, after a use of many months, has only a slight earthy smell.

For detecting alternations in checks or other documents, M. Blarz uses two liquids. He paints the paper with a solution of 1 part of castor oil in 6 parts of 95 per cent alcohol, and thus brings out traces of erased writing by making the paper partially transparent. The second application is a two per cent aqueous solution of caustic soda. If, as is usually the case, the forger has restored the paper with sandarac varnish, the varnish is removed and the writing on it destroyed.

The first municipal lighting by acetylene gas is reported to be that of Totis, a small town of Hungary. Several houses in addition to the streets and squares are lighted in this manner, and with excellent results.

The most powerful microscope objective yet made is a one-tenth inch mono-bromide of naphthaline immersion lens, made by Zeiss. Its numerical aperture is 1.60, and it has resolved or made visible a detail only one-two hundred thousandths of an inch in width.

Calcium carbide is found by M. Yvon to furnish a simple means of obtaining absolute alcohol from common spirit, as it decomposes every trace of water but has no effect upon pure alcohol.

### THOUSANDS STARVED

Santiago de Cuba, Feb. 18.—(Correspondence of the Associated Press.) While the U. S. cruiser Montgomery was at Matanzas recently, a board of officers was appointed to inquire into the condition of the people of that province. Although the exact terms of the report are not known, it may be said that, in substance, it sets forth that there are 14,000 people absolutely without food and clothing within the city limits. About 3,000 of these live in small huts of palm branches. These huts form three separate villages beyond the built-up portions of the city. The other 11,000 unfortunates live in the streets of the city and are absolutely without homes or shelter.

These 14,000 people are of the laboring class, who have been driven into the cities from their country homes which have been destroyed in the war operations. Most of them are women and children, and they are all emaciated, sick and almost beyond relief, unless they can have the benefit of regular treatment in the hospitals. As it is, they are dying in the streets for want of food.

According to statistics gathered from the best official sources, the number of deaths in the province of Matanzas from starvation is 59,000; and the number of starving people at present in the

province is estimated at 98,000 out of a total population of 253,516 in December, 1897, and the number of starving people is rapidly increasing.

In the city of Matanzas alone there have been about 11,000 deaths during the past year, and the number is increasing daily. The death rate at present averages 46 per day, as shown by the reports from the cemetery. The increase in the death rate is due to the fact that the distress is no longer confined to the laboring class, most of whom have already perished. It is now extended to the people who before the war were in moderate comfortable circumstances. Those now begging in the streets were in large part well to do people or children of the well to do. In addition, the citizens of the city of Matanzas themselves are begging for the actual necessities of life, having exhausted their resources in order to supply the needs of the laboring class who have been quartered upon them.

The citizens of Matanzas have an organized system of relief for the starving people, but it is entirely inadequate and is daily becoming more glaringly so, for the resources of those who were well to do are rapidly diminishing, while the demand for food is constantly increasing. At one of the stations the board of officers found 100 starving, this being the actual number of people for which the citizens had been able to provide relief there. Pans of rice and fish were arranged in rows ready for distribution among the people, who were waiting in another part of the house. But this relief does not begin to supply relief for the 14,000 people who are starving in the streets, for the citizens are only able to issue food three times a day at each place and then to only about 100 at a time. Consequently only about 900 of the destitute people receive food on a day.

It should be added that a large number of the citizens of Matanzas have fed the starving in the streets in front of their own homes, but the citizens themselves are feeling the pinch and privation, and unless assistance soon comes to them, they will be compelled in self protection to cease the work of charity in which they are now engaged, and which is seemingly the only salvation for the starving thousands.

The only other public relief at Matanzas is that given to the sick children by the management of the Emergency hospital, which is under the direction of the volunteer fire department of Matanzas. There about eighty children are treated daily and are furnished with nourishment under the direction of the city physicians.

These statements are the conclusions, facts and figures arrived at by board of U. S. naval officers. When the U. S. naval officers landed they were constantly followed by clamoring crowds of starving men, women and children, who importuned them in the most heartrending manner for a little food for the want of which they were slowly dying.

The U. S. consul at Matanzas has done everything possible under the circumstances, but when the Montgomery left there in the first days of February, the consul had only enough rations remaining to last about two weeks, after which the fund appropriated by Congress would have been exhausted and then the sufferers of Matanzas would include the American citizens at that place, who have hitherto received relief through the U. S. consulate. At that time the consul had received a petition signed by the American citizens of Matanzas, setting forth in detail the need in which they stood of immediate relief from the dangers of starvation.

So far as the board of officers of the

Montgomery could ascertain, Matanzas at that time needed a supply of food for 14,000 people for at least one month, in addition to supplies of condensed milk for invalids and medicines of all kinds. The people of Matanzas are also in urgent need of clothing, most of them being in filthy rags.

The Spanish authorities it may be said in conclusion, have rendered all the assistance which it seems possible for them to provide. On two occasions they have given \$100,000 to the fund for the destitute, but so far as the board could learn this was all the government was in a position to contribute to the relief of the 14,000 starving, dying people in the streets of Matanzas.

### ADVANTAGES OF DIVERSITY.

[Denver Field and Farm.]

We have had much to say during the last ten days regarding the importance of crop diversity in our Colorado farming operations, but it looks at times as if the advice had been wasted. There is just as much need as ever for diversity, and Field and Farm will feel that its work is not half completed until the custom of diversification becomes quite general all over the West. Our most scientific and studious agriculturists understand the benefits of diversity and crop rotating, but a great majority are heedless in regard to these matters and are inclined to treat the subject lightly, much to their own disadvantage. It is past the time that we can plant one crop and expect to come out whole. In fact, the period has reached us when we are compelled to raise at least our necessities at home.

There is one fundamental condition for a diversified crop, and this is climate and soil favorably adapted for a variety. No one can deny that in our state we are peculiarly favored. When once the farmers really believe this, much of the hard times in Colorado will speedily come to an end. There is only one thing lacking, an effort on the part of the farmers themselves. But before this effort will be made we must realize that time spent in the production of crops other than wheat or alfalfa alone, is not time wasted, and is not too much trouble.

Diversity of crop requires more preparation than one crop alone. It is not likely that the class known as renters will be suitably equipped, hence arises the necessity for the people to make vigorous efforts to own their own farms. And this does not mean the ownership of a section, a half-section or even a quarter section of land. The renting class must be willing to begin with the ownership of ten acres. It is a great mistake to suppose that the Colorado farmer is not as good as any other farmer. He is above the average and can produce as much as any other farmer, and he can and will diversify, provided he can see a market for his products. He has learned enough about farming to answer his present needs. What he has to learn is how to sell to best advantage what he makes. So far as we can see, we will have to go slow and work out by degrees, but we ought to have some definite aim and try to work up to it.

Some men will always keep on in the old way. It is difficult to change one's habits, but there are many men of sense and nerve that will lead out in new directions, and when they happen to hit a new thing, others will take after them. This has been illustrated in the lamb feeding operations of Larimer county. Our advice to a man who wants to plant a single crop would be to arrange as fast as possible for raising more hoofed stock, cows, hogs, sheep and colts, and poultry, chickens, turkeys, geese and ducks. In arranging for this one might mark off a portion