week Ellen went out with her 'bloke' and the other evenings to her club.

"Polly was another girl who described her life to me. She was very small and thin, with several teeth out, and an enormous bun of hair at the back. She was twenty and had been married seven months to a sober chap, who only drank beer once a week for his Saturday dinner. On Sunday her chap gave her a cup of tea in bed at 7 o'clock, and then she got up and got breakfast. She spent the morning tidying up. 'My chap says I'll die with a broom in me 'and,' she said. Then she got dinner, generally a meat stew After dinner she had a lay down while her chap read the paper, the weather being too cold to go out.

"Lily, a tall, fine-looking girl of nineteen, confessed that one glass of beer made her light-headed, and that she was drunk very often. 'Not every night,' as her mate declared, 'but on Saturdays and Sundays and holidays.' She had not touched anything for a fortnight, and asked me to give her a pledge card to sign, which I did the last day.

"I do not believe that all or even the majority of these girls are often really drunk, but I know that they think nothing of going into a public house and of getting drunk occasionally. The reasons for this are obvious. As children, all these girls were constant habitues of public houses, fetching the drink for their parents. The public house was never a forbidden place to them, and as soon as they became wage-earners it was their first resort. Tired out with a long day's work on insufficient food, the quickest and pleasantest pick-me-up was to be found in their old haunts with the landlady all smiles behind the counter' as one girl said, and the lower their wages, the more reckless and improvident their manner of spending them.

"Then all their social events are celebrated with drink-weddings, birthdays, even funerals, and all holidays mean a drinking bout. For six weeks before Christmas these girls each contributed 2d. a week to a spirit club. On the day before Christmas, this money, amounting to several pounds, was spent on whiskey and port wine (with a little ginger beer for a few tectotalers), and was drunk in the factory at breakfast and dinner time. And then those girls who felt they had not had enough went out to a neighboring public house and got more drink.

"It was nothing, they told me, for a girl to spend on drink out of her small carnings a shilling or even more on Christmas Day. And yet these girls are to be the mothers and home-makers of the future. How are they being prepared for these vitally important duties? What habits and what equipment do they possess for exercising their vocation of motherhood?"

## MERCERIZING COTTON CLOTH.

The mercerization of cotton cloth has not yet been brought to that state of development attained in the mercerization of yarn, in spite of the many ingeniously constructed machines for the continuous mercerization of cloth which have been brought out by leading machinery builders In my opinion the effect produced by mercerizing the yarn can never be obtained by mercerizing the cloth. It is not sufficient merely to impregnate the maco, or similar cotton fibre, with a concentrated alkali solution, and give it that transparent, gelatine like appearance. There is no doubt that the silk-like lustre demands impregnation in a concentrated alkali solution and subjection to tension at the same time. It is well known that this lustre is still further heightened when the yarn is kept in tension until completely dry. My belief that the lustre obtained by mercerizing the piece must always be inferior to that obtained by merceriz-

ing the yarn is based upon the following views: It is un questionable that the tension is greater upon the filling than upon the warp, while both are saturated equally with the alkali. The machine that will stretch warp and filling to the same degree has not yet been made. As the shrink age of cloth is so great, it is necessary to stretch it out well to preserve the width; as a consequence all the machines are constructed with an endless pin chain, as clamps will not hold the slippery goods. This results in the filling threads alone being stretched. If the warp is to be subjected to the same tension as the filling, this must take place at the moment of saturation with the alkali solution in order to obtain the same effect as on the filling. This is never the case, however, and it follows that the mercerization of the filling is always more intense than that of the warp. Another important reason why cloth can never be mercerized as well as yarn or warp is this: The yarn is well singed in the raw state, and after this operation, which must be carefully performed, passes to the mercerizing proper, during which each individual thread is thoroughly impreg nated with the alkali solution, and at the same time subjected to the indispensable stretching. In all cloths, particularly close-set fabrics, thorough singeing of each thread is out of the question, because the heat or flame cannot reach that part of the threads where they are pressed closely to gether in the cloth, no matter whether a gas or plate singer is used, consequently all place that are not reached by the singeing process retain a more or less fuzzy appearance, which in the course of subsequent handling becomes very plain and injures the general effect of the dyed goods. After the goods have been thoroughly singed the subsequent process necessary to finish them ready for the market causes a disarrangement of the position of the threads and brings in evidence the parts of the threads that were hidden and consequently not affected by the singeing process.

The lustre of mercerized goods is increased by calender ing, but this calender effect is not permanent. A possible remedy for this difficulty may be found in singeing the warp and filling yarn, and then mercerizing the cloth. This might make it possible to run the mercerizing machine much faster, and thus give a greatly increased production by which the cost of the first mercerizing would be greatly reduced. I have repeatedly subjected goods to successive mercerizing processes, and found there was no danger of injuring the material if proper care was taken.—Textile Excelsior.

## A LESSON IN CLOTH ANALYSIS.

By cloth analysis is meant the taking of a small sample of cloth and analyzing or dissecting the same so as to produce an exact copy of the sample in the woven goods, both as to texture and design, the counts of the yarns, and the weight of each as ascertained from the given sample. There are several methods by which the design or pattern in the sample can be obtained, but only two of these will be noticed. One method is to take out a number of threads from the left hand side of the sample and also from the top of the sample, says a writer in the Journal of Textile In dustries. These threads, if carefully kept in their proper order, can be used for the obtaining of the required data by which to reproduce the cloth and the sample will not need to be further mutilated. The sample is then taken in the left hand between the thumb and the finger, the first pick is then dislodged from its position by the pickout needle, and if the warp thread is raised, then fill in one square, if raised for more than one fill in as many squareas there are threads raised. If the thread is not raise!