

of a grating of small bars about one-sixteenth of an inch apart, and each bar is pierced in the middle. In fact, all of these are the harness of a small loom used in weaving tape, braid, garters, belts and the like.

Among the old-time families of New England, this apparatus is set up by taking a ball of twine or thread which is to constitute the warp, and walking around a number of chairs placed at a distance from one another as many times as there are to be threads in the warp. This coil is then cut apart, one end tied together in a knot, and the separate threads of the other end passed through the holes of the slats and between them. This apparatus is worked by lifting and depressing this frame as the weft shuttle is passed backward and forward by the hand. At each turn the weft is beaten home by the harness, the lower end of which is held between the knees, by the shuttle, or by the hand.

In a Zuni example in the Museum set up by Mr. Cushing, the weaver sits upon the ground, having the far end of the warp fastened to some part of the building, and the proximal end attached to a stick forming part of a belt. The very same process employed by the New England woman is also in vogue among the Pueblos. By lifting and depressing the frame which is simply a couple of parallel sticks to which split reeds are tied, having holes burnt through the center, the weaver is able to pass the shuttle stick backward and forward.

When the Pueblo woman wishes to make short garters she uses the soles of her feet as a resting place for the little bar to which the far end of the weft is attached. Her shuttle is a stick on which the weft yarn is wound.

The Finnish harness is carved from a single block of wood, the upper and lower borders being somewhat cylindrical and the

upright bars carved like little slats from the solid piece. These are perforated exactly after the manner of the New England examples.

I learn by inquiring at the Patent Office in Washington, that in Belgium a patent has recently been issued for an improvement on this style of weaving apparatus.

I leave the question open as to the amount of contact between the Fins, the New England housewife and the Pueblo woman. It is easy enough to account for the dispersion of this apparatus among the white people of Europe, and thence among the Fins and the New England farmers. The only question for us to inquire into now, is, where did the Pueblo woman learn to weave after this fashion?

Dr. Matthews tells me that the Navajo do not use this frame, but make their belts by means of a harness similar to that which they employ in making their blankets. It is also a question where and how the Navajos learned to set up a loom so much like those found among the primitive European weavers. It is a fact that the Aino employ precisely the same apparatus as do the Navajo.

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THE SOCIAL SENSE.

ALL persons thrown intimately with children from about four years of age and later may serve psychologists by making detailed observations of what may be called '*chumming*' on the part of children and youth. By '*chumming*' is meant all instances of unusually close companionship voluntarily made, '*platonic affection*,' personal influence one over another when this influence is limited more or less to one person, and when the relationship is stronger than ordinary and is shown in any unusual or remarkable ways, such as bearing punishment for or with the other, moping or becoming very unsocial when separated. Cases of

boys chumming with boys, and girls with girls, are especially valuable; and of older persons of the same sex. Similar observations are needed on cases of marked or unreasonable *antipathy* of one child to another.

The object of the inquiry is to get light on the growth of the child's social sense, what it is that attracts and repels him most in others. To this end observations on the following points are especially desired by the writer.

In every case of chumming or antipathy:

1. (a) Ask the child A why he loves or dislikes the child B. Take down the answers in full. (b) Repeat the question once a week for six weeks at least, if the phenomenon continues.

2. (a) Observe what A imitates most in B, and (b) whether he imitates the same actions or qualities in others besides B. (c) Note whether what A imitates in B is more prominent in B than in other persons.

3. (a) Observe how far A shares his toys, property, food, pleasures, etc., with B more than with other children. (b) Ask him why he gives his things to B. (c) Observe whether this keeps up if B does not reciprocate.

4. (a) Observe any cases in which A is willing to suffer for or with B. (b) Whether he will fight for him, or defend him with words (give details of actions or words of defense).

5. Observe whether B figures largely in A's dreams (a) by noting any speech aloud when sleeping, and (b) by asking A frequently what he dreamed about the preceding night (being careful not to suggest B to him in any way).

6. State all the details of the relation between A and B especially. (a) Do they see each other oftener than they do others? (b) Do they sit together in school? (c) Do

they room or sleep together? (d) Have they any common infirmity or fault (stammering, defective vision, stooping, deceitfulness, &c.)? (e) Have they ever been punished or disgraced together in school or at home?

7. Give (a) what is *known* (not mere impressions) of the disposition of each; (b) the length of time they have shown the liking or antipathy.

8. In case of the breaking off of the liking or antipathy (a) note all the facts which lead to it. (b) Question each child as to why he has ceased to like or dislike the other.

9. When the relation is mutual make the same series of observations with the second child, B, as with the first, A (as given above).

10. Give the number of companions of each child reported on: (a) Number of brothers and sisters, and their ages and places of residence with or away from the child reported on. (b) Amount of time per day which the child spends with other children in school and on the street, etc.

11. Make special note of any unusual occurrences or action, showing the affection or antipathy, which are not covered by this schedule.

N. B. All observations should cover as many of these enquiries as possible, yet observations of some of them only should still be sent in. All observations should be carefully arranged under the headings of the schedule, *i. e.*, by the numbers, letters, etc., in order to secure correct classification. All reports and enquiries should be addressed to the undersigned at Princeton, N. J., and should bear the name and address of the sender plainly written. All names, personal details, etc., are strictly confidential, except when special consent to the contrary is given in further correspondence.

J. MARK BALDWIN.

PRINCETON.