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DANISH ELEMENTARY RURAL SCHOOLS

WITH SOME REFERENCE TO SEMINARIES FOR THE TRAINING OF RURAL TEACHERS

By H. W. FOGHT
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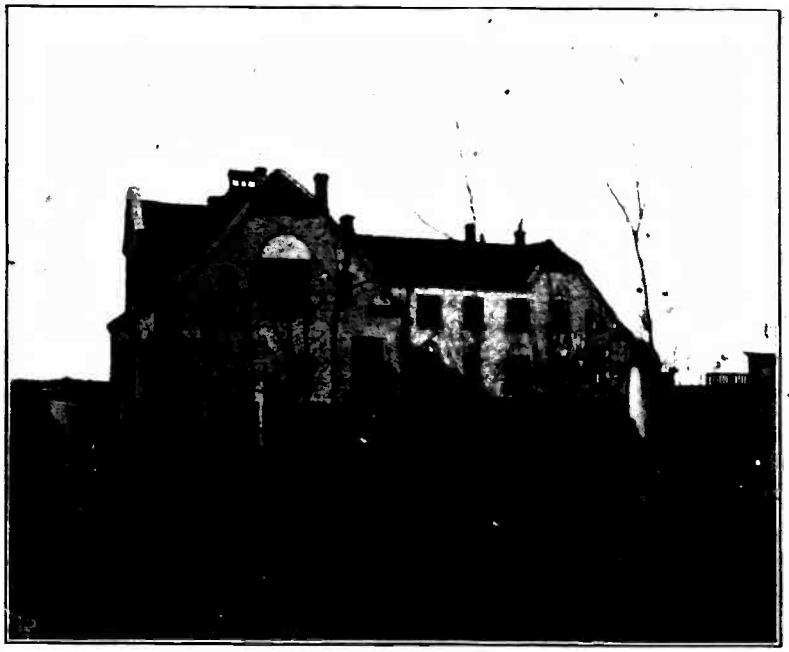
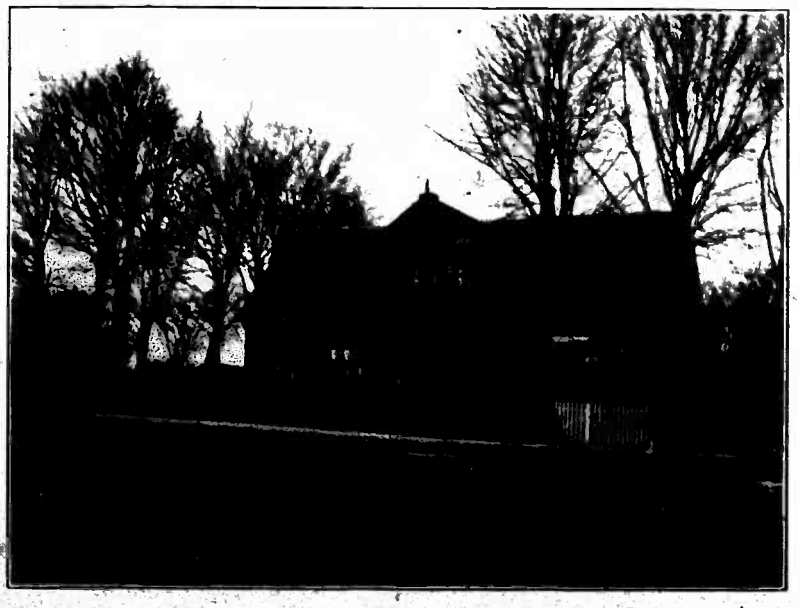


A. HIMMELEV RURAL SCHOOL, NEAR ROSKILDE, ZEALAND.



B. HJORTESPRING ONE-TEACHER SCHOOL, NEAR HERLÖV, ZEALAND.

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ILLUSTRATIONS.

LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, October 20, 1913.

SIR: I am transmitting herewith the second section of the report of Harold W. Foght, specialist in rural education of the Bureau of Education, on rural education in Denmark, the report being the result of a first-hand study of these schools made by Mr. Foght in the early part of this year. This section of the report contains a detailed description of rural elementary schools, of their work and of their relation to the rural life of Denmark; also some account of the seminaries for training teachers for rural schools. I recommend that it be printed as a bulletin of the Bureau of Education.

Respectfully submitted.

P. P. CLAXTON,
Commissioner.

To the SECRETARY OF THE INTERIOR.

PREFACE.

This report is the result of a personal study of a number of Danish elementary rural schools, made during the winter and spring of 1913. Sufficient time was spent in the different schools, in a study of their organization and administration, to insure accuracy of impression. These field studies were later verified, so far as possible, in the office of the ministry of education and ecclesiastical affairs.

The list of 34 schools which follows below was compiled by Mr. V. Aagesen, chief of department in the ministry of education and ecclesiastical affairs. It was not arranged to show the best rural schools, but to show all phases of the rural schools—good and bad alike. A number of the schools in the list were studied because of the modern architecture, others because the structures were old, having been used for many years. Some had teachers of recent training; others, teachers of the "old school." The list of schools—which is taken exclusively from the open country and rural hamlets—is entirely typical and afforded a good basis for study. This, however, was not limited solely to these schools, but included such others as were encountered while going from place to place:

Names of schools.	Head teacher.	Address.	Number of teachers.
Zealand:			
Hjortespring	Egeberg	Herlev	1
Himmelev	Smith	Roskilde	3
Snoddelev	Gehl-Christensen	Gadstrup	2
Langstrup	Johansen	Fredensborg	1
Mullerup	Mathiassen	Slagelse	2
Helninge	Rasmussen	do	1
Hong	Hougaard	Hong	2
Smidstrup	Plesner	Skelskor	1
Magleby	Henrichsen	Klippinge	2
Karlse	Kristensen	Karlse	3
Fyen:			
Stenlose	Teglbjerg	St. Clemens	2
Haarslev	Mathiassen	Haarslev	1
Ejby	Hindse-Nielsen	Odense	3
Norre Naraa	Tejsen	Skamby	1
Strandby	Wegdal	Haarby	2
Gamborg	Hasserlis	Kauslunde	1
Ejby	Andersen	Ejby	3
Ullerslev	Hansen	Ullerslev	3
Lolland:			
Ostofte	Aldal	Maribo	3
Reersnas	Hansen	Bandholm	3
Brandstrup	Mortensen	Ryde	1
Vejleby	Wester	do	1
Oreby	Johansen	Saxkjobing	1

Names of schools.	Head teacher.	Address.	Number of teachers.
Jutland:			
Vrsa	Edslev	Vrsa	3
Stevnstrup	Kristensen	Stevnstrup	1
Gransten	Jensen	do	1
Pederstrup	Dalum	Viborg	1
Lerberg	Rasmussen	Lerberg	1
Saxild	Jespersen	Odder	2
Sovind	Jörgensen	Sovind	2
Orsted	Nielsen	Orsted	3
Halsted	Sögaard	Halsted	2
Pjedsted	Lund	Pjedsted	2
Smidstrup	Andreassen	Borkop	1

A general acknowledgment of assistance is due the ministry of education and ecclesiastical affairs and the many teachers of the rural schools who, without exception, freely gave their valuable time and in other ways rendered help.

DANISH ELEMENTARY RURAL SCHOOLS.

I. ORGANIZATION AND ADMINISTRATION OF THE SCHOOLS.

Brief history of the rural schools. - The common people of Denmark had only meager opportunities for schooling prior to the seventeenth century, when the great "pietistic" reform movement forced the organization of a free public-school system. At that time, it has been estimated, 80 per cent of the people living in the country and 40 per cent of those living in towns could neither read nor write. Now only about one-tenth of 1 per cent of all the people are illiterate. The year 1739 marked the first definite steps in public-school organization. A royal promulgation of that year directed that schools be opened in every commune, and parents and legal guardians were admonished to send the children to the schools. King Frederick IV erected some 240 schools for this purpose; but trained teachers were scarce and times were hard, so that much less came of the law than had been hoped.

The first real advance in educational affairs came through the ordinance of 1814, which immediately made Denmark a model among European nations in educational affairs. The new law made school attendance compulsory between the ages of 7 and 14 and enforced attendance through a system of fines. Definite salaries and pensions were provided. Steps were taken to give the teachers a reasonable professional training, and these in turn became assured of permanent "calls" to long-tenure positions. The schools were maintained entirely by the local communes. Instruction was obligatory in the religious subjects (Bible, Bible history, catechism, and religious hymns), reading, writing, arithmetic, singing, and gymnastics (for boys).

The supervision of the schools was ineffective until after 1848, when the ministry of education and ecclesiastical affairs became the central authority in all educational affairs. In 1856 a new law was passed under which the State undertook to defray a part of the school expenses, such as salary increases and direct aid to weak communes. In 1899 teachers' salaries were materially increased and teacher training was greatly improved. The inner management of the schools and the course of study were also bettered. In 1908 still another

salary law went into effect. This was so liberal as to make the position of rural teacher very attractive. In most particulars the management of the elementary schools is left to the local communes under State supervision.

The following table gives number of children of school age, school enrollment in public and private schools, and number and sex of teachers. It is compiled from the latest official data, January 1, 1911:

TABLE 1.—*Rural schools in 1910.*

Children of school age accredited to—	
Public schools	239,356
Other schools	19,101
Instructed at home (by tutors, etc.)	2,020
Not stated	589
Abnormal, sick, etc.	452
Total	261,518
Children actually enrolled in the schools:	
Public schools	242,291
Private schools, etc.	18,405
Abnormal, sick, etc.	452
Of school age not in school	370
Total	261,518
Number of schools:	
Public	3,225
Private and other	443
Total	3,668
Teachers in public schools: [1]	
Men	3,830
Women	1,523
Total	5,353

It appears from the table that both public and private schools are maintained in rural communities, although the latter are found only in comparatively small numbers. These also are State supervised and must maintain certain standards of work. Of all the children of school age only 370, or one-tenth of 1 per cent, failed to attend school during the year. The number of men teachers is much larger than that of the women teachers, although the number of the latter has been on the rapid increase in the past few years. This has not been at the expense of the men teachers, for they, in actual numbers, are also on the increase. The explanation lies in the large number of primary schools (Forskoler) that have been established, requiring the services of women.

Compulsory education, as well as free instruction, ends with the close of the elementary school. In the rural districts several kinds of

[1] In addition to these there are about 700 teachers in private elementary schools in rural districts.

private continuation schools flourish. In effect they are "free schools, since the Government gives the schools liberal State aid and even subsidizes worthy students. In 1,150 rural communities night schools are maintained (1911) for pupils who have completed the elementary schools, but can not afford to attend the regular farmers' continuation schools, the folk high schools, local agricultural schools, and schools of household economics.

Rural children who may desire an education other than for farm life usually enter the middle schools of the incorporated towns immediately upon completing the elementary course. Then they may continue their study through the Gymnasia or Real Skoler to the National University, or the National Polytechnic Institute; or they may earlier branch off into the various technical schools, trade schools, schools of navigation, etc.

Ministry of education and ecclesiastical affairs.—Since 1848 the administration of public education has been vested in the ministry of education. This department issues all necessary administrative circulars and bulletins for the direction of school authorities, including general rules and regulations for the schools. The authority of the ministry may be classified as direct and appellate. Certain school matters *must* be decided by the ministry; others *may* be settled by it on appeal from lower authority. Under the former head the ministry has sole authority on all questions of teachers' salaries, pensions, and increases (except as limited by law), and in the enforcement of courses of study, together with changes in same. Likewise ministerial sanction must be obtained before new schools are established, even though the communal authorities might be a unit in favor of the proposed schools.

In a general way the following summarizes the powers and duties of the ministry of education: To interpret and enforce all educational codes passed by the National Rigsdag; to decide questions of difference which may arise in lower administrative circles; and to recommend needed school legislation to the Government.

The ministry of education has in its employ a national "konsulent," or educational specialist, who gives advice on legal questions coming up for decision. He may also propose improvements and alterations in the school system. Other educational specialists attached to the ministry who give it expert advice, in addition to having the national supervision in their several departments, are general inspectors of music, gymnastics, sloyd, and drawing.

In this way enough of the administrative machinery is centered in the general government to assure uniformity in educational effort.

The church in school administration.—Almost from time immemorial bishops, deans, and local ministers have had active part in school

administration. These men have naturally exerted a powerful influence in school affairs, because they were, then as now, with few exceptions the best equipped men in their respective districts for just such work.

The bishops were expected, under the law of 1814, to have close supervision over the schools within their respective bishoprics. To this end they may require regular reports from the deanery boards and the local boards of education. In the olden time the bishops were accustomed to assemble the parish children at the church and there examine them in "Godly and worldly learning." Later this inspection of educational matters was transferred to the school building. Of recent years the bishops have become satisfied to delegate the immediate school inspection to the deans and local ministers; while they still require regular reports from the several school boards.

An interrelated system of school directories and school boards.—The schools are administered, for convenience, with the various political and religious units as bases. In this way each of the 19 *amts*, or municipal subdivisions, has its amt school directory. Each of the 73 deaneries has its deanery school directory. Finally, each of the 1,134 country communes or parishes has its own school commission working under the direction of the parish council.

The amt school directory is a superior body comprising representatives from each of the deanery directories or boards of education within the amt. Its chief function is to administer the permanent school fund of the amt, and certain other matters dealing with school maintenance which can not wisely be intrusted to minor boards. Even this directory is not given free hand to administer the fund as it might deem best. Every amt school directory is held in check and assisted in its tasks by an amt school council, which draws its membership from the regularly constituted municipal council. This arrangement gives the assurance that the school funds will be administered according to practical business principles, since these two boards are almost sure to have in their membership some of the ablest men in the municipality.

The deanery school directory or board of education is the most important link between the ministry of education and the local communal boards. The latter can reach the ministry through the deanery board only; while the ministry in its turn administers all local affairs through the medium of the deanery board. The management of a great many matters of local concern is delegated to the final decision of the deanery board by ministerial decree or by law. The supervision of the schools is one of the board's most important duties, though in practice the dean alone visits the schools. He is obliged to make full reports to the ministry of education from time to time, on blanks furnished for that purpose. The deanery board

as a whole must finally file with the ministry an annual report of school matters within the deanery, together with recommendations and suggestions for educational improvement.

The communal or parish school commission has the practical administration of the several schools within the parish. The commission comprises the parish pastor and members chosen from the parish council. The local pastor is charged especially with school supervision. In matters concerning financial expenditure the school commission becomes subordinated to the parish council, which in such matters has the final word.

All the school directories and commissions are interrelated to a remarkable degree, and their duties and responsibilities are divided so as to secure excellent results in school administration. By way of illustration, matters of school maintenance are largely in the charge of the large amt school directories; but these are amenable to suggestions from the deanery directories and requests from the local parish councils and school commissions, and they may even be regulated by the ministry of education. School supervision is governed in much the same way.

The ministry supervises the schools through its educational specialists; the bishops supervise the schools within the bishopric, occasionally in person, though generally through subordinates; the dean is charged with visitation and school inspection of all deanery schools; and, finally, the local school commission, headed by the local pastor, supervises the two or more parish schools.

II. THE MANAGEMENT OF THE SCHOOLS.

Compulsory attendance.—School attendance is compulsory between the ages of 7 and 14. Time is counted from the beginning of the first half year of school immediately after the child has completed the seventh year, and ends with the close of the half year of school during which the child has completed the fourteenth year. Children may, however, be received in the schools as soon as they have reached the age of 6. A considerable number take advantage of this concession. Abnormal children and others affected with infectious diseases do not come under these regulations, but are provided with separate schools governed by other regulations.

The recent annual increase in numbers of rural children of school age is considerable, if the total population is taken into consideration. The annual increase is materially larger than in Copenhagen and the provincial towns. The numbers of school age for 1909, 1910, and 1911 were, respectively, 255,681, 258,888, and 261,518. Table 2 gives final figures for the school year ending January 1, 1910.

TABLE 2.—*School attendance of rural children, 1909.*

Sex.	Where instructed.				Of school age not in school.	Abnormal, sick, etc.
	General public schools.	Other public schools.	Private schools.	Home (tutors and governesses).		
Boys	117,376	3,174	9,908	970	316	225
Girls	113,437	2,638	9,062	1,263	327	192
Total	230,813	5,812	18,970	2,233	643	417

A glance at the table shows that a large majority of the children of school age are in school. Only 643 children were unaccounted for during the year. Table 1, giving statistics for 1910, makes a still better showing, with only 370 children unaccounted for. A large majority are in the public schools. Those in private schools are chiefly children of the country gentry, who have not yet overcome their prejudices against "free schools." The several thousand instructed at home are children of wealthy parents, some of them of the old nobility, preparing for admission to the "learned schools" in Copenhagen. But whether instructed at home, in private or public schools, such instruction is enforced during the compulsory period, without fear or favor, upon all alike. All children must be able to show certificates of successful vaccination when they enroll in school.

Enforcement of the compulsory-attendance law.—As a rule, the Danish people are so imbued with the value of education that they will go to any extremity to keep the children in school. Or where this may not be the case, the wholesome respect for law will prevent them from disobeying it. The few who persist in avoiding their legal responsibilities are punished so severely that they are, as a rule, glad enough to change their ways.

The head teacher in every rural school is charged with the task of keeping a complete record of all the children of school age within the district. This otherwise arduous duty is simplified by a requirement of law that parents and guardians must give notice to the parish council one week before they intend to withdraw their children from school when moving away from the parish. The same kind of notice must be given to the authorities of the parish to which the family moves, in order that the children may be properly recorded without loss of time. Children are kept on the records of the school from which they have moved until the teacher is notified, in writing, by the teacher in the new parish that these children are reenrolled in school. This method of tracing the children has had excellent results.

The teacher must investigate all cases of absence from school and decide whether they were "without legal reason." Once a month

such cases are reported to the parish council, who may make further investigation as to the justness of the charges. The parents or guardians of the delinquents are fined, unless the former are able to show that the children in question are habitual truants; in which case the children themselves are taken in hand by the council. The fines appear small, as compared with American money, but are heavy enough for the classes in Denmark most likely to err in school matters. Twelve öre [1] must be paid for each day's absence during a first month of offense; 25 öre for each day during a second month; 50 öre during a third month, and 1 krone during each day of a fourth month—this with the further provision that there shall be an added fine of 25 öre for each absence above four each month, provided that in no case shall the fine exceed 1 krone per day. If necessary the parish council may have recourse to the processes of law to collect these fines. And the important fact is that the fines are collected.

Length of school year.—According to the ordinance of 1904, "instruction shall be given in town and country schools during at least 41 weeks." As a Danish school week covers 6 days, this gives a minimum school year of 246 days. But the law is not interpreted to mean that all the children or all the classes must be in attendance all the time during these 246 days. Actual attendance becomes a matter of a specific number of 60-minute periods spent in school weekly. On this point the law states that in the larger towns the average minimum amount of instruction for each class shall be 21 hours, and in rural districts 18 hours weekly. This does not, however, include gymnastics, sloyd, handwork, drawing, or household economics, which would increase the number of hours very materially.

The following table gives the number of rural school classes (or groups) in the most important subdivisions of the Kingdom which fall below the minimum number of school days, the number employing more than 246 days, etc.

TABLE 3.—*Length of term in rural schools.*

Subdivisions.	Number of classes.						
	Less than 246 days.	246 days.	247–251 days.	252–257 days.	More than 257 days.	Not stated.	Grand total.
Zealand	13	1,246	525	450	57	9	2,300
Bornholm	2	14	.....	112	.....	.....	128
Lolland-Falster	3	260	112	96	.....	.....	471
Fyen	9	178	544	314	40	.....	1,085
Southeast Jutland	63	840	430	513	81	.....	1,927
North Jutland	8	824	429	317	48	10	1,636
Southwest Jutland	128	1,112	208	147	70	375	2,040
The Islands	27	1,698	1,181	972	97	9	3,984
Jutland	199	2,776	1,067	977	199	385	5,603
Total	226	4,474	2,248	1,949	206	394	9,587

[1] An öre is about one-fourth of a cent.

The table shows that 4,474 classes attended school on the basis of the legal minimum of 246 days to the school year; 226 classes fell below the minimum because of epidemics or sudden illness of teachers; 4,887 classes attended on the basis of more than 246 days.

Division of school days.—As stated above, the minimum requirement in rural schools is 18 sixty-minute periods weekly (not counting gymnastics, sloyd, drawing, handwork, and household economics). How these periods are arranged for the various classes is left to the teachers and the local school commission to decide; and this decision is generally governed by the needs and conditions of the community. Usually the older children spend more time in school during the winter months than the smaller children, with the reverse in summer. Some schools arrange their programs wholly on the half-day session plan; others give a certain number of whole days (below six) to each class; others, again, have both half and whole day sessions for the different classes. This variety of arrangement can best be made clear through illustration.

Vor Frue Landsogns Skole, near Odense, in Fyen, is organized into eight grades, and these grouped into six groups. Grades 1, 2, 3, and 4 are separate groups, grades 5 and 6 form group V, and grades 7 and 8 group VI. The school year covers 246 days only. The school day begins at 8.30 o'clock during winter and 8 o'clock during summer, and closes legally at 3 o'clock, although four days in the week the children have gymnastics and domestic science from 11 to 12 and from 3 to 4 o'clock, for "forenoon" or "afternoon" pupils, respectively. Groups 6, 5, and 2 spend their forenoons only in school; while groups 4, 3, and 1 are in school afternoons only. This arrangement gives each grade four hours school work daily for six days a week. The actual time in school during the year is 984 hours or 164 school days of the length customary in the United States. There are three teachers in the school. During the forenoons five classes are in school, which gives two teachers two each and the third teacher only one. These teachers do not keep the same room or classes all the time, but change from room to room with the change in hours. During the afternoons there are only three classes in school, one for each teacher. Considerable home study is required of all pupils, so that the four periods in school can be devoted to recitations and careful assignments for the following day's work. The half-day sessions in this school certainly have many points in their favor: (1) The teacher devotes his full attention to not more than two classes during the half day; (2) the pupils are wide awake and busily at work all the time by reason of the shorter time and of the continuous personal attention from the teacher; (3) the older pupils may devote a portion of the afternoons to work on the farm—an item which can not be ignored in Danish agricultural economy at least.

Himmelev Rural School, near Roskilde, in Zealand, affords an illustration of the mixed system of both half and whole days. This is a well-organized school of three teachers. School is in session for 43 weeks out of the year, or during 258 days. The only time the school is at rest is during Christmas, Easter, and a short vacation in August. The idea prevails that it is a good thing to keep children in school practically all the year, but for shorter school days than is the custom in some countries. At Himmelev the older pupils attend school four whole days and two half-days each week during the winter half-year, while the pupils in the four lower classes are in school three whole days and two half-days. In the summer time, when the older children are needed at home this arrangement is reversed. This makes an average of 4½ days a week per pupil, or 193.5 school days to the year.

Ejby Rural School, Ejby, Fyen, may be used as a last illustration. Here, also, attendance is on the mixed plan of half and whole days, for 250 days of the year. Table 4 makes this plan clear:

TABLE 4.—*Class arrangement in Ejby rural school.*

Classes.	Hours weekly.		Days weekly.		School months of 20 days each.
	Regular.	Gymnastics.	Half.	Whole.	
1A	18		6		6½
1B	18		6		6½
2	18		6		6½
3	21	4	5	1	8½
4	24	2	4	2	9
5	24	2	4	2	9
6	27	2	3	3	10
7	30	2	2	4	11

It must be understood that this table is for the winter half years only. In summer the conditions are reversed. 1A—the primary class—attends 6 half days only during the winter; at the same time the highest class is in session 4 whole and 2 half days. This makes a yearly average of 3¾ days attended per week for each pupil throughout the school year. On the basis of 20 school days to the month, the average school year at Ejby would be 8½ months.

The course of study.—The law requires certain fundamental subjects to be taught in every rural school. The list includes religion, reading, writing, arithmetic, geography, song, drawing, gymnastics (for boys), and handwork. Other subjects which are optional with the school commission and the local community are nature study, hygiene and sanitation, sloyd, household economics, and language other than Danish.

The table following gives the number of rural schools requiring the additional subjects and also extra periods in drawing.

TABLE 5.—*Number of rural schools with instruction not required by law.*

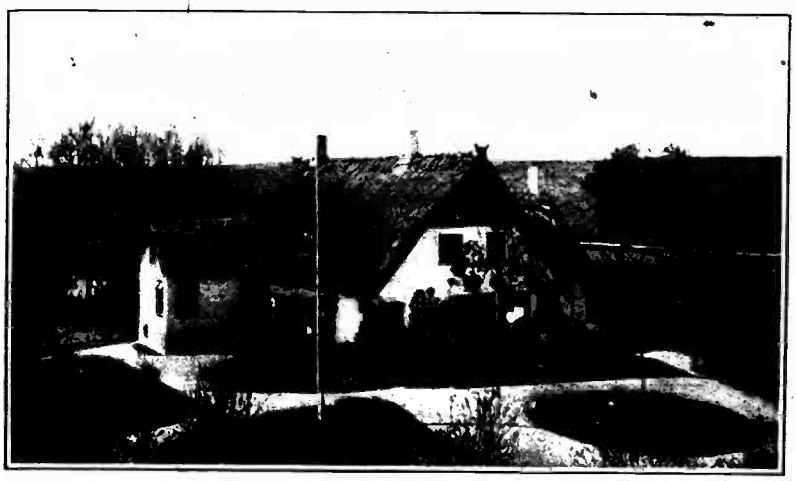
Rural schools.	Number of schools with instruction in—									
	Natural science, including nature study.	German.	English.	French.	Other languages.	Mathematics (above arithmetic).	Hygiene and sanitation.	Farm accounting.	Sloyd.	Drawing (extra classes).
Advanced grades (5–8)	196	57	61	9	4	25	99	90	11	146
Elementary grades (1–4)	7	3	3	.....	.....	.....	103	.....	.....	6
Continuation schools	15	14	15	5	2	13	15	.....	2	11
Total	218	74	79	14	6	38	21	90	13	163

Natural science with special reference to agriculture receives more and more emphasis. Nature study is taught informally in all the lower classes (Forskoler), although not as a separate subject, but rather as a leaven in all the subjects. German and English are prominent on account of the close commercial relation with these countries. The mathematics of Table 5 is algebra, and geometry as applied to mensuration. Hygiene is given in the primary grades through informal talks. This subject is taught in most of the schools. Sloyd is not in the course of many rural schools, although on the increase. The larger towns and cities, on the other hand, are are far ahead of the rural districts in manual training.

Class organization.—In very few rural schools is all the instructing left to one teacher. In such rare cases that teacher must be a man. But, as a rule, the district has a Forskole, or school for primary pupils, in charge of a woman teacher. This is often entirely separate from the regular school, in its own building, and generally more centrally located, because of more recent origin than the main school.

The primary schools teach reading, writing, arithmetic through whole numbers, and singing of children's songs and hymns. Much of the work is based on object lessons. The narrative method is used largely in teaching the outlines of Bible history, Danish history and mythology, geography, and natural history (nature study). Gymnastics and play, especially the latter, receive much attention in the Forskole. This work ends with the fourth year.

In the regular one-teacher districts the children are under the care of a man teacher from the beginning of the fifth school year, unless the district offers no Forskole work, when, of course, the children enter the regular school from the first. But it must be kept in mind that very many of the Danish rural schools are regularly graded schools of two or more teachers, all working in the same building. In such cases there are no separate Forskoler.



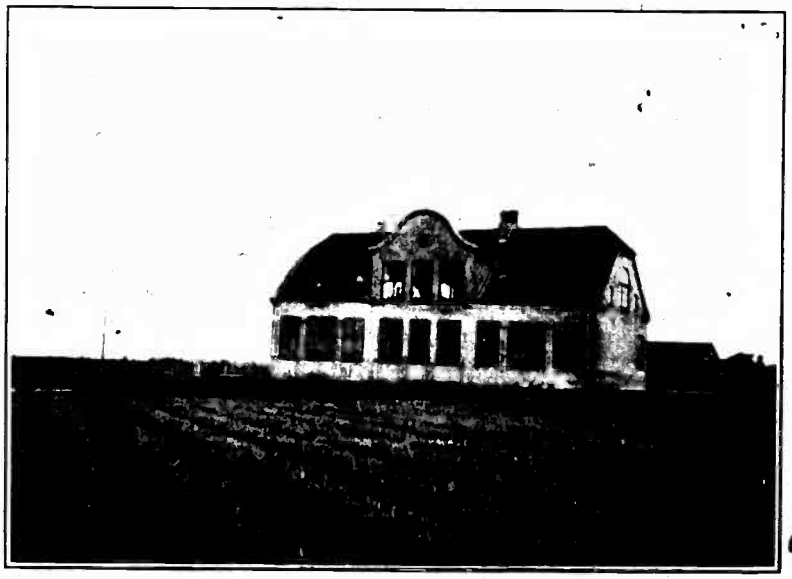
A. HOME OF A RURAL TEACHER.

Part of the [illegible] garden can be seen.

B. A TYPICAL TEACHERS' HOME OF THE OLDER SORT.

A. OLD-TYPE ONE-TEACHER SCHOOL AT GAMBORG FYEN.

The long thatched building is the teacher's home.



B. TYPICAL DANISH RURAL SCHOOL.

Contains two classrooms and gymnasium, with teachers' quarters in second story. Building materials are yellow brick and red tile.

The school subjects.—A point of note is that reading and spelling are not treated as arts complete and separate. They are taught rather as means necessary to higher educational ends. Spelling is taught as a part of the reading process. Consequently, separate spelling books are not used. Under the experienced teachers usually found in the schools the mechanical and technical phases of language, as reading, spelling, and grammar, are handled in such a way that the children show a good ability to apply the language of the classroom to the language of the school ground and the home. Danish language is taught largely through "doing," i. e., through composition and dictation exercises. The teacher may give dictation from some simple reader or classic; this is then studied and analyzed, and rules of grammar are applied as needed. The work is largely of an inductive nature.

The religious subjects, Bible history, catechism, sacred music, etc., are strongly emphasized in all the schools. Bible history is given orally in the lower grades and is studied from textbooks in the upper grades. As taught, it furnishes an excellent foundation for general history. Catechism is taught from textbooks, much of it verbatim.

History and geography hold high place in the course of study. All school work, in fact, is given a historic background. History study is not limited to Denmark and Scandinavia alone. Danish history receives special emphasis, it is true, but the course is rooted intelligently in the general history of all Europe and the Orient. A certain amount of church history is taught in the religion classes; this supplements the work in the history of the middle ages. Scandinavian mythology is studied as one of the history foundations. The geography classes devote much time to the Scandinavian countries, though the course covers the physical, mathematical, and political history of the entire globe in a reasonably thorough manner. The methods employed in teaching history and geography do not seem always of the best. In a few of the schools too much of the old memoriter processes prevail, and some of the teachers are inclined to lecture on history before the children instead of teaching it.

Children in the primary grades are early made acquainted with nature, in part through stories and narratives dealing with natural history, illustrated by means of charts and colored pictures, in part through a study with their teachers of the school environment. The upper grades get a rather thorough course in natural history or biology, covering a general outline of botany and zoology and ending with a study of man, together with hygiene and sanitation. The amount and thoroughness of the work varies greatly with the schools.

Very few rural schools offer courses in manual training or sloyd; but indications are that such work is getting popular in the larger schools. Some of the night schools do good work in sloyd. Many of the village and city schools have excellent courses of this kind.

Handwork, such as sewing, knitting, darning, and embroidery, is required in all rural schools where women teachers are employed. In some of the one-teacher schools with men in charge, the wife of the teacher gives instruction in handwork, for which she receives a little pay.

Singing is taught in all rural schools. All teachers must be able to instruct in music, whether they can sing or not. The teacher almost invariably accompanies the song on a violin, which all teachers know how to use. Patriotic and religious songs, folk songs, and nature songs are sung remarkably well. Even part songs are common in many schools.

Drawing is popular and well taught. Accuracy and neatness are watchwords in the drawing classes. Much the same can be said for the writing classes. Here, too, the children display much painstaking care and neatness. It is true the writing seemed to lack rapidity. Our "muscular movements" in writing have little or no hold on the schools.

Much more attention is paid to mental arithmetic than in American schools. The quickness and accuracy displayed by the younger children in analyzing problems is quite remarkable. Enough of plane geometry is included in the highest class to furnish an intelligent foundation for problems in mensuration.

Gymnastics is compulsory in all the schools for boys. The older girls generally take the work as a "special" after regular hours. In the first three or four grades the boys and girls take the work in mixed classes. Later the sexes are drilled separately. The newer rural schools are supplied with indoor gymnasiums. Where these are lacking, a suitable plat of ground must be prepared out of doors, sanded, and supplied with suitable apparatus. The work in gymnastics is uniformly good. It is later taken up where the elementary schools have dropped it and continued in the various folk high schools and local agricultural schools.

Methods of instruction.—Danish rural schools depend more upon the ability of the teachers and less upon the textbooks than American rural schools. The teachers are professionally prepared, and consequently know how to draw upon their broad general reading and experience for much of the classroom materials, instead of depending upon the textbooks to furnish everything required. The latter are mere "leading threads" in the school work, containing only the fundamental processes if in mathematics, or outline studies if in history, etc. The teacher supplies the rest. This means that the average teacher is free from slavish use of books and can give more of his own self and individuality to the work. Where the books do not furnish everything, both teachers and children make larger use

of the constructive and inventive ingenuity. On the other hand, it is true that some of the Danish textbooks are too meager and of rather poor mechanical construction. In the hands of inexperienced teachers they would be of little value.

School work observed in some of the schools.—It is desirable to describe with some detail work actually observed in the Danish rural schools. For this purpose four schools are selected, not because of any marked excellence above any other schools visited, but because they were the first four schools that chanced to lie in the path of visitation.

Ryslinge Rural School.—The teacher in charge of this school is Mr. P. J. Winther. He was just completing the thirteenth year in the district, having spent 19 years in another parish before coming to Ryslinge. The school stands upon an elevation from which can be seen miles of beautiful South Fyen landscape. It is surrounded with garden and parking, and at one side and at the front with well-sanded playgrounds. The whole is surrounded by well-kept living hedge, outside of which forest trees are planted. Immediately beyond the school lies the country church, and the manse with its gardens and fields. This is a one-teacher school, having a Forskole at a distance of 1 mile. The building is modern and well built. It will be described upon later pages of this bulletin. The teacher has his abode in the school building. The main classroom is well lighted and is heated by a jacketed ventilating stove. There is an abundance of illustrative materials of all kinds, such as geographical and historical maps, biological, physiological, and other charts. A good collection of physical apparatus is used as the basis for simple experiments in natural science. A small chemical cabinet contains what is necessary in milk testing, working with soils, and the like. Good geological and ethnological collections are neatly arranged in cases at one side of the room. A circulating library of 600 volumes is available for the children and their parents. The deep windows are filled with house plants and nature-study materials. The school room is, in short, a good working laboratory for a genuine country school.

The time spent at Ryslinge school was devoted mainly to a study of classes in gymnastics. The gymnasium is indoors. It is a model for simplicity and neatness, being square, of good floor, and equipped with all the inexpensive apparatus required in the Ling system of gymnastics. Mixed classes of boys and girls from 8 to 11 years of age gave an interesting exhibition of their everyday work. Before this began the floor was carefully mopped to keep down the dust. Then the windows were thrown wide open, in spite of the chilling March wind. All the children wore slippers, and the girls had short bloomer-

like skirts. The work included the Ling system of "setting up" exercises, marches, the use of the Swedish wall racks, arm beams, and horse for vaulting, etc. Boys and girls entered into the spirit of the work entirely unconscious of sex differences. Part of the exercises were accompanied by song—something that is noticeable even in the gymnastics of the higher continuation schools. It is a common thing, for example, to see large classes of husky young farmers in the gymnasium of a folk high school to burst suddenly into a rousing war song or a patriotic lay. At this particular exercise the song suddenly changed in time and the march resolved itself into a folk dance. This, again, changed to play. But at a signal from the teacher the ranks were immediately re-formed. Three-quarters of an hour was occupied with exercises of similar kind.

Grades 5 and 6 were called upon for song. Mr. Winther directed this and led the singers upon the violin. First scales were run for some five minutes. In the singing that followed, the children had good opportunity to display their ability to read music. Several national, folk, and religious songs were sung. What appealed to the auditors more than anything else was that every child took part. This is a test of thorough handling of the class.

Opportunity was also given to examine specimens of writing by all the grades and of original compositions by grades six, seven, and eight. The writing was exceptionally neat and painstaking. The compositions showed considerable thought and knowledge of history, geography, and agriculture—these being the most popular themes employed. The general impression carried away from this school was that Mr. Winther fully realizes the needs of his school community and had shaped his school work accordingly. He presided over a school thoroughly organized, well disciplined, and in harmony with country-life needs.

Vor Frue Landsogns Skole.—This school has been used to illustrate other points in this bulletin, but can well be discussed a little further. The school lies just beyond the large provincial town of Odense and is attended by 210 children, most of them from the homes of small farmers, country artisans, and day laborers. It is in a sense a consolidated school with three teachers in charge. Because the school uses the half-day system for all the pupils, there is not that congestion which would otherwise be unavoidable in a school of more than 200 and only three teachers. The school building is modern and roomy. Mr. Hindse-Nielsen, the principal, and his two assistants have suites in the building.

The following is a reproduction of the daily program of six groups into which the classes are divided. It will be recalled (p. 14) that groups I, II, III, and IV correspond to years 1, 2, 3, and 4, but that group V comprises years 5 and 6, and group VI comprises years 7 and 8:

DAILY PROGRAM.

Group.	Hours.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday	Saturday.
II.	8-9	Danish.	History. Geography.	Religion. Arithmetic.	Geography. Nature study.	History. Arithmetic.	Religion. Writing.
	9-10	Arithmetic.	Danish.	Danish.	Danish.	Danish.	Danish.
	10-11	Writing. Song.	Arithmetic. Nature study.	Writing. Nature study.	Writing. Danish.	Religion. Song.	Story hour.
	11-12						
I.	12-1	Religion. Writing.	Danish.	Religion. Writing.	Danish.	Religion. Writing.	Danish.
	1-2	Danish.	Nature study. Song.	Danish.	Arithmetic.	Arithmetic. Nature study.	History. Arithmetic.
	2-3	Arithmetic.	History. Danish.	Story hour.	Nature study. Song.	Danish.	Writing. Nature study.
	3-4						
	4-5						
	5-6						
V.	8-9	Reading.	Religion.	Geography.	Religion.	Natural history.	Religion.
	9-10	Arithmetic.	Writing.	Arithmetic.	Writing.	Arithmetic.	Dictation.
	10-11	Dictation.	Song.	Dictation.	Reading.	Reading.	History.
	11-12	Gymnastics daily for seven months.					
III.	12-1	Arithmetic.	Writing. Religion.	Writing. Religion.	Arithmetic.	Arithmetic.	History.
	1-2	Reading.	Reading.	Reading.	Reading.	Reading.	Writing.
	2-3	Composition.	Composition.	Song.	Composition.	Geography.	Reading.
	3-4						
	4-5	Handwork for girls four hours weekly.					
	5-6						
VI.	8-9	Religion.	Geography.	Religion.	Literature.	Religion.	Natural history.
	9-10	Writing.	Arithmetic.	Danish.	Arithmetic.	Literature.	Arithmetic.
	10-11	Danish.	Danish. Composition.	Song.	Composition.	History.	Literature.
	11-12	Gymnastics daily.					
IV.	12-1	Religion. Writing.	Arithmetic.	Religion.	Arithmetic.	Reading.	Arithmetic.
	1-2	Reading.	Reading.	Dictation. Composition.	Reading.	Writing.	Reading.
	2-3	Dictation.	Dictation.	History.	Geography.	Song.	Dictation.
	3-4						
	4-5	Handwork for girls four hours weekly.					
	5-6						

The inspection at this school included classes in singing, arithmetic, and nature study. The singing did not differ much from what had been heard at Ryslinge. The children sang from notes, running the scale remarkably accurately. They kept time with their arms as they sang. Religious, patriotic, and folk songs were rendered with feeling and trueness to note. Some of the part songs that were sung would be considered difficult for children of equal age in good city schools of the United States.

The sixth grade gave an interesting recitation in mental arithmetic, about one-half of the arithmetic period being devoted to mental drills. Hands went up with answers ready almost as soon as the figures were completed. A careful analysis was made of each problem. There seemed to be no laggards in the class, for all hands invariably went up. The following common and decimal fractions were placed on the board, one after another, by the teacher: $2\frac{7}{12}+11\frac{11}{36}=$ $6\frac{3}{4}+8\frac{1}{24}=$ $9\frac{3}{5}-7\frac{1}{10}=$ $5\frac{5}{8}-2\frac{11}{16}=$ $3\frac{1}{3}\times2\frac{1}{8}=$ $7\frac{1}{2}\times1\frac{4}{5}=$ $11\div1\frac{1}{6}=$ $13\div3\frac{1}{4}=$ $1\frac{1}{3}\div0.33=$ $0.48\times3\frac{5}{12}=$. For rapidity and accuracy the exercise was quite remarkable. The three American visitors, who themselves laid claim to some ability in "figuring," found it pretty difficult to keep pace with these sixth-grade farm children. More mental arithmetic in our own lower schools would probably be a good thing.

The nature study lesson was in charge of the primary teacher—a woman—and was devoted almost wholly to the English sparrow. The class was the second grade. Colored charts, last year's nests, and blackboard drawings were utilized freely in the discussion. The children displayed considerable knowlegde of bird lore and were given opportunity by the teacher to express this in their own way. It became clearly manifest before the period closed that this young woman was succeeding in creating a love for nature in the breasts of the little ones who should later, as scientific farmers, become the wardens of this nature and its creations.

Ejby rural school.—This is a consolidated school, and lies in the open country between the old hamlet of Ejby and a new railway station by the same name. The fine brick building (described in the section on architecture), with its modern classrooms and homes for four teachers, was erected in 1911 as a compromise after several years of lively agitation.

The following table gives the subjects of instruction, together with the number of periods weekly in each of the eight classes. There are three teachers in this school:

TABLE 6.—*Class arrangement in Ejby rural school.*

Subjects.	Classes.							
	1A	1B	2	3	4	5	6	7
Religion	4/2	4/2	3	3	3	3	3	3
Danish language and literature	6	6	7	7	7	7	7	8
Writing	3	3	2	2	2	1	1	1
Arithmetic and farm accounting	3	3	3	4	4	4	3	3
Special farm problems							1	2
Geography			2/2	1	2	2	2	2
History				2	2	2	2	2
Biology and agriculture				1	1	2	3	4
Nature study and sanitation	4/2	4/2	4/2					
Song	2/2	2/2	2/2	1	1	1	1	1
Drawing							2	2
Gymnastics	1	1	1					
Gymnastics (boys)					1	1	1	1
Handwork (girls)					1	1	1	1
Hours weekly	18	18	18	21	24	24	27	30
Gymnastics—Boys				2				
Gymnastics—Girls				2	2	2	2	2
Handwork (girls)				2				
Total number hours weekly—Boys	18	18	18	23	24	24	27	30
Total number hours weekly—Girls	18	18	18	25	26	26	29	32

The gymnastics and handwork will be seen to fall partly within and partly outside the regular daily program. Gymnastics is given in mixed classes for grades 1A, 1B, 2, and 3.

The inspection here included classwork in natural history and advanced arithmetic. The natural history as studied in Danish schools is really elementary biology. It includes descriptive courses in zoology and botany, devoting considerable time also to human physiology. The class at Ejby had for their lesson the general topic "mammalia," and dwelt particularly on the domesticated mammals, making practical applications to the cow, horse, sheep, etc. Danish teachers are of the opinion that nature study (love of nature), natural history (acquaintance with nature), and agriculture (application of both love and knowledge of nature) can all be acquired in the rural schools; practical agriculture, however, is studied in continuation schools after leaving the elementary school.

The class in advanced arithmetic was engaged in working out original problems in mensuration. Enough of plane geometry was used to make the rules of measurement intelligible. One-half of the class was occupied with finding the contents of a seven-sided field, the actual dimensions of which they had secured by measuring the field; the rest calculated the water surface of a pond lying at some distance from the school. All this work was practical and far superior to what was observed in a number of other schools, some of which stuck too closely to the textbook.

Hjortespring rural school.—The last school to be mentioned is a one-teacher school near the village of Herlov, in Zealand. Mr. Johan Egeberg, the teacher, had been in the school seven years, coming to

the community from a school tenure of 19 years elsewhere. His position was found to be that of unquestioned leadership among the intelligent people of the community. His school building, too, was modern, and beautifully set on a ridge surrounded by living hedge, trees, and shrubbery.

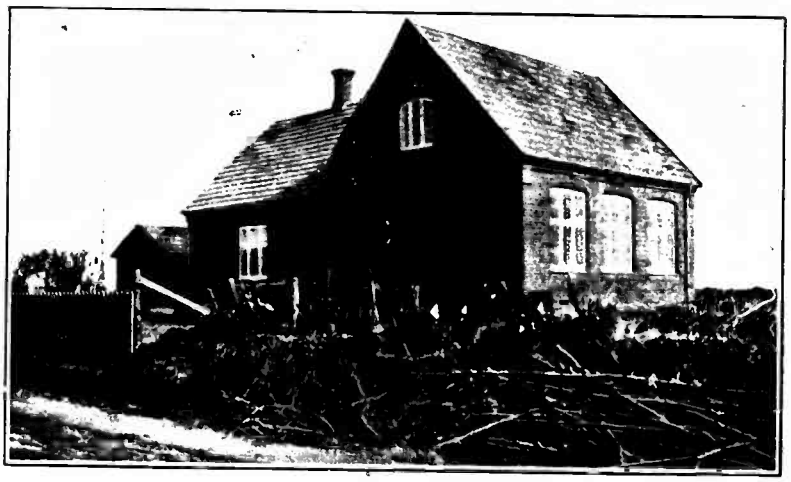
The comments on the school work at Hjortespring are given as a summary rather than as the result of observation of single classes, because more time was spent here than in most of the other schools.

Reading and language: Reading as a fundamental art is strongly emphasized. A combination of several methods is used in teaching young children to read. Spelling is, from the first, a part of the reading. It is not considered an end in itself; hence, no separate textbook is used. All the spelling grows out of the reading. The reading books are arranged in such a way that they can be used as language books also. The mother tongue is learned inductively, through the reading and explanations offered by the teacher. Very early the children are taught to copy on paper or on their slates small portions of reading matter from the reading-language book. This is analyzed and explained with the teacher's assistance. Next follow dictation exercises by the teacher. The children are expected to write down correctly what is given them, emphasizing properly sentence structure, punctuation, capitalization, etc. Rules are laid down as needed for convenience, not before. By the time the children reach the eighth grade, they have a good understanding of language usages without having used a specially prepared book. Now a compendium in grammar is used in order to finally clarify and summarize what has been learned.

Arithmetic: The textbook contains the essentials only, the teacher supplying the rest. The thoroughness with which the four elementary processes are learned is striking. Rules play a very minor part. The children learn by doing. Mental arithmetic is popular and well taught. The textbooks contain considerable material with a farm "flavor." Farm accounting and farm problems comprise a big part of the subject matter in the books.

Geography: A small textbook and a large separate atlas are used. The historical and political elements are prominent; though most of all the commercial and agricultural phases are emphasized. History and geography are taught as inseparable.

History: The children get a large vision of the historic field before leaving school. In the beginning they are taught the history of Denmark, and this is inseparably connected with the history of Norway and Sweden, thus giving the children in reality the history of the north. It is also to a large degree rooted to England, Holland, Germany, and Russia, so that much of general history creeps in. All the children are taught Bible history. This is a simple narrative



A. A "FORSKOLE" NEAR KAUSELUNDE IN FYEN

The woman teacher lives in the corner.

B. ONE OF THE SMALLEST ONE-TEACHER SCHOOLS IN DENMARK.

The love of nature is evident in planted vines and trees.

of Bible events from Hebrew and oriental history. In addition, the highest class gets a simple outline of church history. So, taken all together, the children get a good historical outlook.

Natural history and nature study, music, gymnastics, hygiene and sanitation, and handwork (the latter in charge of Mrs. Egeberg) are uniformly well taught, but do not differ materially from what was seen in the schools already described.

III. SCHOOL ARCHITECTURE, SCHOOL GARDENS, AND PLAYGROUNDS.

Schoolhouse construction.—The construction of all new school buildings and the modification of all old structures must be done in accordance with a circular issued by the ministry of education. Such important matters are not left entirely with the local commune and school board. And wisely so; for if this were done, the best interests of the school district might be made to suffer from the selfishness and parsimony of a few influential individuals. As matters now stand, all building construction must comply with ministerial regulation. The final plans and specifications, whether for a new building or for the construction of an old one, must be inspected and ratified by the large deanery school directory before the local authorities can proceed to build. In specific cases the local board may appeal to the ministry of education for final decision on points in controversy.

According to the circular of 1900, the building site must be large, sightly, and sanitary. Each classroom must be large, well-lighted, and ventilated. The ceiling must be at a height of not less than 10 feet. Schoolrooms in Forskoler and the regular elementary schools must contain a minimum air space of 4,000 and 5,000 cubic feet, respectively. This is figured on the basis of a maximum of 35 pupils to the room. Each room shall have at least a ventilator shaft connected with a jacketed stove as means of ventilation. Many are supplied with hot-air furnaces and the cold-air ducts that belong to such systems.

Every schoolhouse must have a well-protected entry hall, supplied with racks and lockers, with at least 3 square feet of floor space for each child.

Wherever practicable new school buildings must contain indoor gymnasiums, and be equipped with all the apparatus required for the Ling system of gymnastics. When this can not be done for good reasons, and in the case of buildings constructed before such requirements were made, an outdoor gymnasium must be constructed to answer this need. This shall be laid off as near the school building as

possible and must contain about 625 square meters. The place must be reduced to a water level, properly drained and covered with several inches of screened sand. Permanent apparatus must be erected on the ground, and apparatus that can not be exposed to the weather without damage may be kept in a storeroom erected for that purpose on the edge of the grounds.

Rules concerning schoolhouse sanitation.—The rules governing the cleansing of schoolrooms are very pertinent and suggestive. They are therefore given in some detail:

(1) The floors must be kept perfectly tight and filled; they must be varnished, painted, covered with linoleum, or otherwise protected from dampness.

(2) The classrooms must be aired frequently—both before the session begins and during all intermissions.

(3) All school furniture and walls must be wiped with a damp cloth daily. All window panes must be polished at least once a week.

(4) The floors must be washed daily and scrubbed once a week with soap and warm water.

(5) The waterclosets must be kept scrupulously clean, and the excreta emptied frequently. The urinals must be washed out daily.

(6) The children shall not be permitted to remain in classrooms and halls during intermission except in inclement weather.

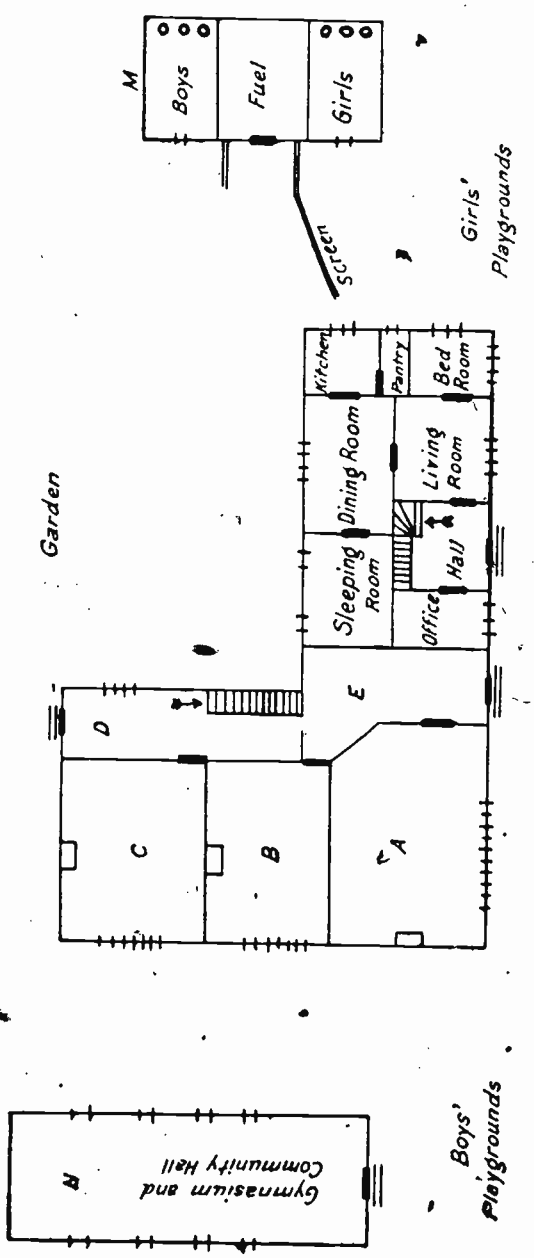
(7) The expense incidental to the enforcement of these regulations shall be borne by the commune. It shall be the duty of the teacher and the local school commission to see that the regulations are enforced.

Ordinarily, Danish teachers, even in the smallest country schools, have nothing to do with the actual work of cleansing the school. Janitors—often women—are supplied for this purpose. In a few districts, however, chiefly in the sparsely populated heather regions of western Jutland, the teachers look after the cleansing of the schools. But they are in every instance paid for this work by the commune.

Some schoolhouse plans.—The Danish rural schoolhouses are substantially built. Many of them are very attractive from an architectural point of view. Practically all the new buildings are well supplied with modern sanitary conveniences. The building material commonly used is brick on reenforced concrete. Tile or slate roofs are in ordinary use. Occasionally one may find old schoolhouses covered with thatch, but these are rapidly passing away. The fearful spread of tuberculosis throughout the country has furnished ample argument for sanitary building construction. At this time the General Government pays a part of the cost of new, modern schoolhouses as an inducement to abolish the old ones. It moreover gives State aid in the modernization of old buildings.

Plan I: This shows the ground plan of Vor Frue Landsogns School, which has been mentioned several times in this bulletin. The building was erected in 1900 at a cost of 30,000 kroner. It has three classrooms and supplies living accomodations for three teachers.

The upper grades have classrooms (A and B) opening upon the main hall (E). The lower grades (C) have their own hall (D) from which their teacher—a woman—may

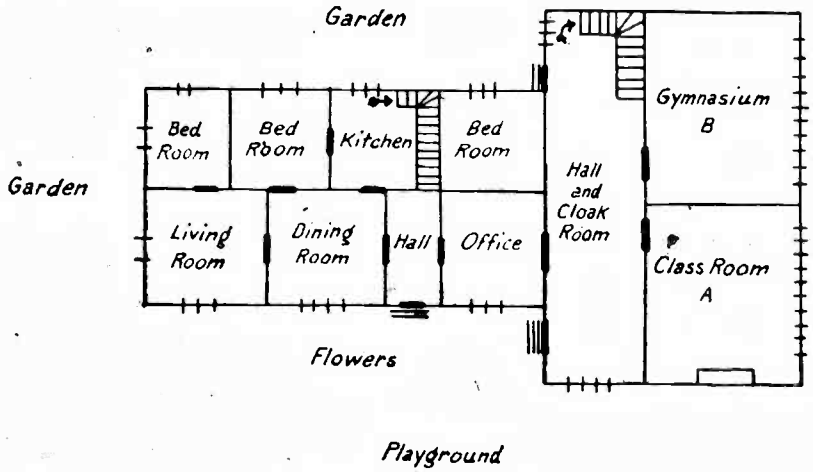


PLAN I. GROUND PLAN OF VOR FRUE LANDSOGNS SCHOOL.

reach her suite of four rooms overhead by her own separate stairway. The "first teacher" occupies the remainder of the first floor. The "second teacher"—an unmarried man—has four rooms above the principal's suite. The fuel house (M), including toilets, lies immediately to the right and to the rear of the main building. The gymnasium and social center hall (N) lies in a like position to the left of the school. The latter structure is used daily for gymnastics by the school children and during certain evenings of the week by the gymnastic association of the parish. It is used, moreover, as the rallying center of the community in its school-extension courses and many social gatherings. The yard is of good size, is well planted, and protected by a strong hedge and picket fence.

Plan II: This is a smaller school, being of one room only. The classroom (A) has, contrary to American ideas, its main window exposure toward the west. But this is easily understood when it is known that Denmark has very few bright, sunny days and something like 90 that are foggy.

The teacher has an office and six living-rooms down stairs, besides several rooms above. Almost all of the teachers in the rural schools who were asked whether they

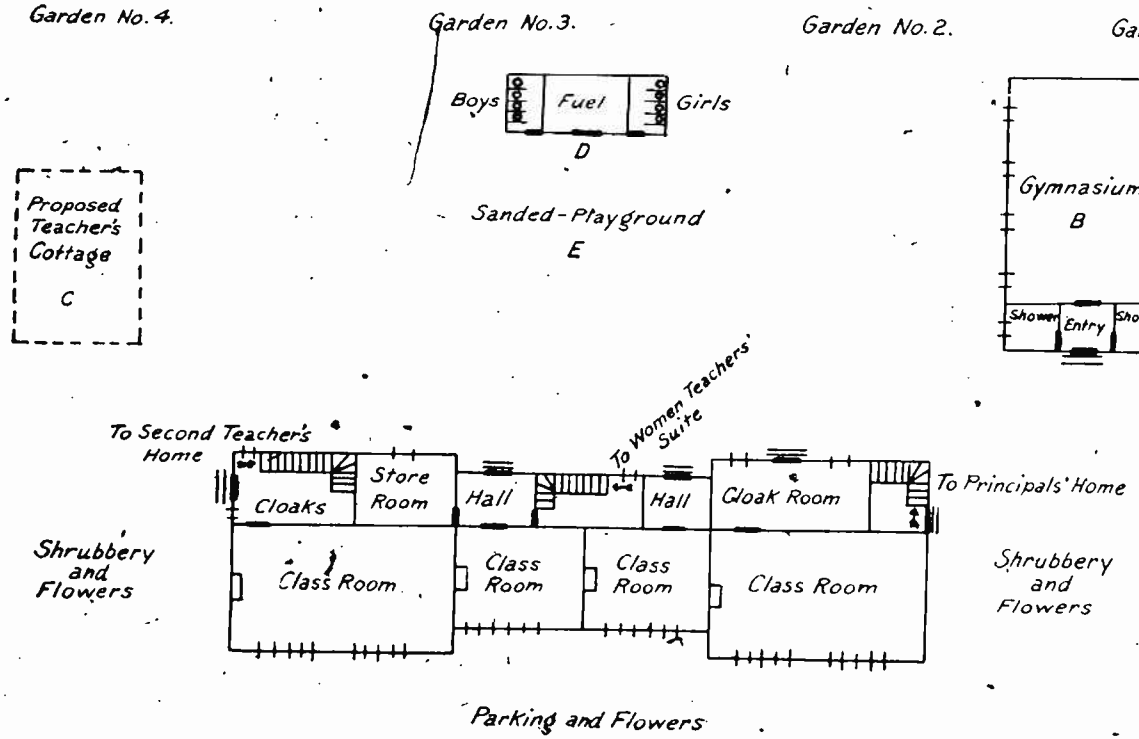


PLAN II. A SMALL SCHOOL.

preferred their present mode of living to separate cottages made answer that present conditions were entirely satisfactory. The noise from the schoolroom seemed of small consequence, especially as this, like all the modern buildings, is of substantial construction. In this particular case, a heavy brick wall separates the classroom and gymnasium from the teacher's home. In many of the schools the teachers' entrance to the building is on the side opposite from the children's entrance. In this way there is little disturbance. It is of great advantage to the teachers to live in their own great laboratory, where they can be always close to their work, and where they can have also the necessary amount of privacy.

Plan III: This is the largest of the rural schools visited. The main building is constructed of hard brick with a tile roof, at a cost of 50,000 kroner. The gymnasium, which lies to the rear and right, cost 10,000 kroner.

It is to be noted that this school is planned on the quadrangle idea. The main building forms the foreground, the gymnasium (B) the right side, a proposed teachers' home (C) the left side, and the fuel house with toilets (D) the rear. A good-sized sanded playground (E) lies within. The entire basement of the school building is cemented. The intention is to use a part for playroom in inclement weather, the remainder will



PLAN III. LARGEST OF THE RURAL SCHOOLS VISITED.

be fitted for manual-training shops. This has not yet been done for want of funds. The first floor contains four classrooms, all lighted from the left, and heated by means of very effective ventilating stoves. The halls are large, affording ample space for wardrobes. Attention is also called to the separate entrances leading respectively to the homes of the principal, "second teacher," and women teachers. The gymnasium is the most complete of its kind found in the rural schools. Besides the large floor equipped with the Ling system apparatus, the building is equipped with dressing rooms and shower baths, above which there is a spacious gallery for spectators. The fuel house and toilets are all under one roof and are substantially constructed of brick. In cold weather the toilet rooms are heated. Four complete gardens, one for each teacher, laid out and planted at community expense, lie to the rear of the quadrangle.

Plan IV: The last ground plan to be shown is taken from an interesting one-teacher school near Herlov, in Zealand. It is a substantial brick building, upon a high, sightly place, surrounded by large forest trees, and shut off from the highway by a living hedge. The building was erected 20 years ago, but it has been so well cared for that it appears almost new.

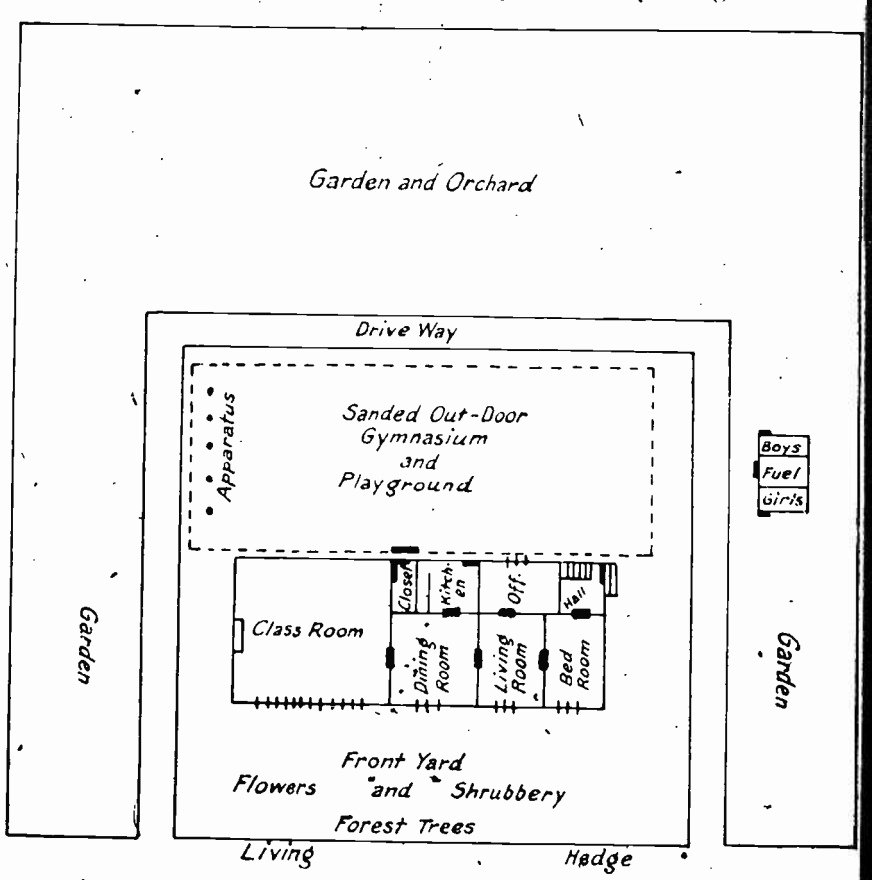
The first floor contains a large schoolroom and the teacher's home of six rooms. The attic has two airy guest rooms belonging to the teacher's suite. The school was built before the day of indoor gymnasiums in rural districts. This has been remedied by laying off an outdoor gymnasium immediately behind the building. It is large and sanded to a good depth. An exercise rack is built in the side of the house and is protected by the overhanging eaves. Frames containing climbing poles and ropes, turning poles and other simple apparatus stand at one end of the ground. A most excellent garden, full of old cherry, apple, and pear trees, lies back of the outdoor gymnasium. While this is the teacher's garden, intended to supplement his income, it is used also as laboratory for the nature study classes of the school.

A compromise in school location.—It is noteworthy that in Denmark the authorities are reluctant to cut up school districts. There is an old inland hamlet called Gamborg, in which a one-teacher school has been conducted for many years. Some time ago a railroad was built through the community, and a station town by the name of Kauselunde sprang up. The new town comprised a part of the Gamborg school district, and its people were from the first obliged to send their children to that school. But the time came when Kauselunde outgrew Gamborg, and there were children enough for two teachers. A compromise was agreed to whereby a nice new Forskole was erected on the highway between the two towns, leaving the original Gamborg school for the older pupils. At Ejby and Himmelev, and at other places, large consolidated schools have been built somewhere between the two hamlets, instead of dividing the school forces as was done at Gamborg. This appears really a more satisfactory way to solve the school problem.

Teachers' gardens.—The provision for free homes is a great stride in the direction of long tenures in the same district, whether it be in Denmark or in the United States. The permanent use of a piece of land in addition to this helps further to make the teacher a permanent community leader. In the olden time, Danish teachers drew much of their income from the permanent school lot, which was a body of land, ranging from 2 to 10 acres, attached to the school. The patrons and others who lived within the school district were even obliged, at

one time, to furnish the schoolmaster a certain amount of forage. Recently the school lots are being sold off, and the teachers' salaries have been increased with a money equivalent. A few are still in existence.

But the teachers' gardens have always been kept separate from the school lots. They go really with the teachers' homes and are considered just as essential to happy, complete country living. Under



PLAN IV. ONE-TEACHER SCHOOL NEAR HERLOV.

the law, the first teacher must have at least one-third of an acre; the other teachers are entitled only to one-fourth as much. In case the land near the school is not adapted to garden use, the teachers may accept a money equivalent, but this is seldom done.

The garden is much more than a vegetable garden. It is a permanent plantation. The community must stand the expense of planning and platting. It must be properly drained and fenced; fruit trees and shrubbery must be planted. And in other ways it

must be permanent and satisfactory. Primarily the garden is intended for the teacher and his family—to give them pleasure and added income. But, as stated elsewhere, they are used for classroom experiment purposes also, not in all schools, though in many. In the gardens, teacher and children dig and rake and hoe, side by side, learning lessons from blade and leaf and flower. It is here, close to the earth, that the children gain their first love of nature.

Playgrounds.—Danish rural schools are not, as a rule, equipped with large playgrounds. This is quite natural in a country where every square foot of ground is needed for bread winning. The important thing is that the grounds, be they large or small, are properly utilized and well equipped to that end. The law forbids loitering indoors during intermissions, except in inclement weather. At this time the children must be out on the playground, and under the eye of the teacher.

Nearly all the playgrounds are fenced. All are well drained, and some part of each is sanded and fit for use even in damp weather. Considerable playground apparatus is found at every school, particularly so where there is an outdoor gymnasium.

IV. OFFICE AND TENURE OF DANISH RURAL TEACHERS.

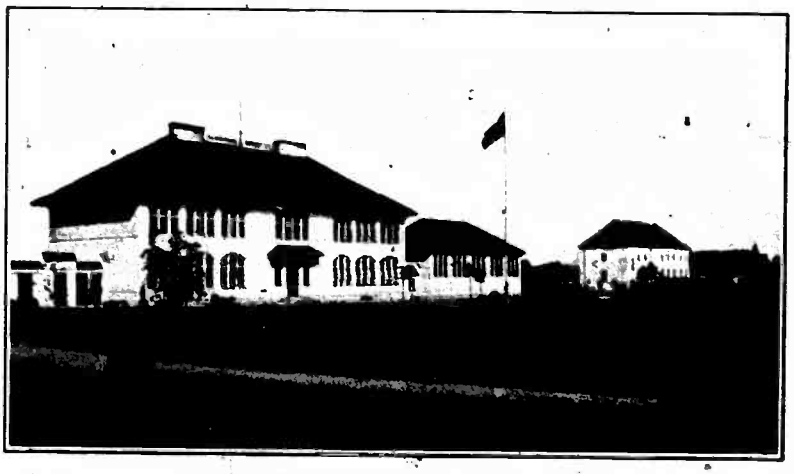
Preparation of elementary teachers.—It is safe to place professional preparation of teachers first on the list in looking for the cause of the uniformly good work done in Danish rural schools. No person can receive a permanent call as teacher who is not a graduate from some one of the 20 normal schools or of the university. Nongraduates may be underapprentice teachers, hour teachers, substitutes, etc., but they are not considered as teachers in the real meaning of the word.

The following table gives a good idea of the preparation of teachers in the public rural schools. As conditions are much the same for teachers in private rural schools, these need not be considered.

TABLE 7.—*Preparation of teachers in public rural schools.*

Teachers.	Men.					Women.					
	Normal-school graduates.	University and other higher schools.	Nongraduates.	Not stated.	Total.	Normal-school graduates.	"Forskole" diploma.	University and other higher schools.	Nongraduates.	Not stated.	Total.
"First teachers"	1,452	6	9	....	1,467	....	....	....	....	....	....
Teachers in one-room schools	1,500	13	48	1	1,652	3	....	....	....	....	3
"Second teachers"	548	2	15	1	566	266	67	6	50	4	393
Primary teachers	23	....	....	2	25	21	602	11	136	1	771
Teachers in temporary schools	8	....	23	....	31	....	3	2	38	....	43
Other teachers	16	7	46	....	71	6	5	14	214	4	243
Total	3,639	28	141	4	3,812	296	677	33	438	9	1,453

A. WALK IN A RURAL SCHOOL GARDEN.



B. HASLEV SEMINARIUM, HASLEV, ZEALAND.

One of the smallest of the 20 seminaries for the training of elementary teachers

Comments on the table are scarcely necessary. Out of a total of 3,812 men teachers, only 141 are nongraduates; of 1,453 women teachers, 438 are nongraduates. The men teachers are practically all graduates. Fully one-half of the women nongraduates are assistants only, and are not counted as regular teachers. The Forskole diploma mentioned under "Women" refers to a special training course for primary teachers.

Now, as a large majority of the teachers get their preparation in the teachers' seminaries or normal schools, it is well to study the requirements of these schools more closely.

Teachers' seminaries—course and requirements.—The elementary-school teachers of Denmark receive their professional preparation in 20 seminaries or normal schools, erected wherever needed throughout the nation. Only 4 of these are State schools; the other 16 are privately owned or belong to some branch of the State church or the free church. The work in all of them is under strictest State supervision. The privately owned schools are practically maintained by the State, which furnishes liberal State aid. Entrance requirements, course of study, final examinations, etc., are similar in all the schools.

Candidates for matriculation must have satisfied the following requirements before they can enter upon study in the first-year class:

(1) They must have reached their eighteenth birthday before the expiration of the first calendar year in school.

(2) They must furnish baptismal, confirmation, and vaccination certificates.

(3) They must show evidence of satisfactory moral character, and show, in detail, how their time has been spent since completing the public-school work.

(4) They must produce a physician's attest to show that they are in good bodily health; especially that they are not suffering from any disease which would make them unfit for the teaching profession.

(5) They must have devoted at least one full year as apprentice in some school satisfactory to the ministry of education. [The presupposition is that all candidates have a good knowledge of the academic subjects. They are then placed for a year in the hands of an expert teacher to permit him to determine whether they have any natural qualifications to recommend them. In case these seem lacking, the teacher may withhold the necessary credentials.]

(6) Finally, the candidate for admission must pass a satisfactory test in the following subjects: (*a*) Arithmetic and elementary algebra; (*b*) outlines of natural history; (*c*) geography with special reference to Denmark; (*d*) history of the north and outlines of general history; (*e*) test in reading; (*f*) written composition; (*g*) elements of Danish grammar; (*h*) Bible history and catechism; (*i*) test in knowledge of music—must be able to play simple compositions on the violin; (*j*) young women must show some ability in sewing and knitting.

The candidates for admission have for the most part pursued study in higher continuation schools since leaving the elementary school; or they have at least spent a year under a capable tutor, preparing for the entrance examinations.

The seminaries offer one year's study in preparatory work for students knowing themselves to be deficient in some of the entrance requirements.

The following is the minimum course for teachers in the rural and other elementary schools:

MINIMUM COURSE FOR RURAL AND ELEMENTARY TEACHERS.

PREPARATORY YEAR.

	Hours weekly.		Hours weekly.
Religion	3	Writing	1
Danish	5	Drawing	2
Geography	2	Song and music	2
Natural history	3	Gymnastics	2
Physics	2	Handwork (women)	2
Mathematics	4	English	1
Arithmetic (separate)	4		

FIRST YEAR.

Religion:		Writing	1
Bible history	2	Drawing (free hand)	2
Church history	1	Song and music	2
Exegesis	1	Gymnastics:	
Danish	5	Men	3
History:		Women	2
Northern history, Norse and Greek mythology	3	Study of human body	1
Geography	2	Handwork (women)	2
Natural history, zoology, and botany	3	German	1
Mathematics:			
Geometry (plane)	3		
Arithmetic	2		
Accounting (mental arithmetic)	3		

SECOND YEAR.

Religion:		Writing and drawing	2
Bible history	2	Song and music, class drills, and harmony	2
Exegesis	2	Gymnastics:	
Danish, grammar, and literature	5	Men	3
Pedagogy	2	Women	2
Geography	3	Handwork (women)	2
Natural history, zoology, and botany	3	German	1
Physics	3	English	1
Mathematics:			
Arithmetic, algebra, and geometry	4		
Accounting	3		

THIRD YEAR.

Religion:		History (European)	4
Dogmatics, church history and exegesis	5	Song and music:	
Danish:		Song practice, theory of music, harmony	3
History of literature, study of classics	5	Gymnastics:	
Pedagogy	6	Men	3
Practice teaching (in the seminary practice school and model school)	10	Women	2
		Handwork (women)	2
		Drawing	1

The policy of Danish schools is to study a large number of subjects at once by reducing the number of hours a week to a minimum for each study, where American schools would reduce the number of subjects and give a maximum number of hours weekly. Danish educators insist that better educational results are gained by "dovetailing" the entire course into an educational whole, all parts of which are held constantly before the mental eye. On account of this belief subjects which could be completed within the school year are drawn out over several. Students do not recite the total number of 60-minute periods given above each week. The course of study prescribes a certain amount of work to be completed annually in each subject. That particular class recites the prescribed number of hours *while* completing this work only. The actual number of hour recitations per week varies from about 28 in the first year to 18 or 20 in the third.

It should be added that there is a movement on foot to make the requirements for graduation considerably heavier than they now are.

How one may become a permanent teacher.—Graduation from one of the seminaries does not necessarily carry with it a Government appointment to a permanent position. The supply of teachers is normally larger than the demand. All are obliged to begin as assistants or substitutes, or as teachers in provisional, private, and special winter schools. The permanent positions in the country include places as principal, teacher of one-room school, second teacher, and woman primary teacher.

Permanent calls to fill vacancies in these schools may be issued only to teachers having all the following requirements:

(1) Principals and teachers of one-room schools must have attained the age of 25 years; all others must be at least 21 years of age.

(2) They must present an attest (not more than three months old) from a reputable physician that they are not afflicted with tuberculosis or other infectious disease.

(3) Preparation must be as set forth above.

(4) Candidates for principalships and for teachers' positions in one-room schools must have had at least two years' experience in practical teaching; i. e., as assistants, substitutes, etc. All other applicants shall have had at least one year's experience.

The important duty of issuing permanent calls to teachers falls to the deanery school directory upon the nomination of candidates by the communal council and local school commission. The procedure is briefly this: The deanery directory announces the vacancy and receives applications for the position. A complete list of all the eligible candidates is then sent to the communal council and school commission (the latter being present in advisory capacity only). The communal council now nominates three candidates from the

list. The one of the three seemingly having the best qualifications is thereupon chosen for the vacancy by the deanery council.

Length of tenure and age of teachers.—The permanently called teachers naturally hold office during life or good behavior. This has many advantages. The teacher feels from the first that he has entered upon a life work in the community and finds it worth while to "grow up with the place." To hold such a position does not preclude the teacher from becoming at any time a candidate for a more desirable place, but teachers seldom remain less than 7 to 10 years in the same community.

Teachers may be expelled from their positions only on account of gross immorality or misfeasance in office. The deanery council may also suspend them temporarily for neglect of duty until an investigation can be made by the minister of education. If it appears that a teacher has outgrown his usefulness in a given community on account of incompatibility of temperament or by having "got into a rut" or the like, he may be transferred to a school to which he seems better suited.

The rural teachers are mature men and women, as will appear from Tables 8 and 9. Principals and teachers of one-room schools show the highest age. "Second teachers" seem to reach promotion to these positions at the age of 30 to 35. None of the assistants is over 30. A few irregular teachers in temporary schools are even below 20, but these, it must be recalled, are not teachers as legally understood.

TABLE 8.—*Ages of men teachers in rural schools.*

Teachers.	Age of men teachers.													Total.
	15–19.	20–24.	25–29.	30–34.	35–39.	40–44.	45–49.	50–54.	55–59.	60–64.	65–69.	70 and over.	Not stated.	
Principals	....	12	96	173	211	190	222	168	153	141	87	14	....	1,467
One-room school teachers	....	26	179	267	226	213	228	175	143	120	71	3	1	1,652
"Second teachers"	1	175	193	91	36	16	20	14	10	6	3	1	....	566
Primary	....	20	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	25
Provisional	2	8	5	.....	2	3	3	2	2	1	2	1	....	31
Winter-school teachers	5	25	6	5	4	6	5	4	1	1	.....	.....	....	62
Others	.....	.....	2	3	.....	.....	1	1	2	.....	.....	.....	.....	9
Total	8	266	484	539	479	428	479	364	311	269	163	19	3	3,812

TABLE 9.—*Ages of women teachers in rural schools.*

Teachers.	Age of women teachers.													Total.
	15–19.	20–24.	25–29.	30–34.	35–39.	40–44.	45–49.	50–54.	55–59.	60–64.	65–69.	70 and over.	Not stated.	
Principals	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	....	....	.....
One-room school teachers	....	2	.....	.....	.....	.....	.....	1	.....	.....	.....	....	....	3
"Second teachers"	....	50	85	53	56	60	42	26	15	3	1	....	2	393
Primary	2	144	217	163	99	59	43	28	4	8	1	....	3	771
Provisional	4	11	8	7	4	2	3	1	1	1	1	....	....	43
Winter-school teachers	21	93	57	17	11	5	8	2	1	1	.....	....	....	216
Others	2	7	6	2	.....	3	2	1	3	.....	.....	....	1	27
Total	29	307	373	242	170	129	98	59	24	13	3	....	6	1,453

Practical results.—Professional training and long tenures have been wrought with great influence on rural community life. The teachers are trained for country life and understand its needs. They enter upon their tasks knowing that they have time to rear well and fundamentally. This results in a community leadership which can not be hoped from peripatetic teachers, like most teachers in American rural districts, who remain in country schools for a term or two and use them only as stepping-stones to town-school teaching or other occupations. Danish rural districts can count hundreds of teachers who would not exchange their positions for a first-rate inspectorship in Copenhagen—all because they have been enabled by these fortunate arrangements to hew out for themselves, where they are, an important niche in the educational life of the people.

V. TEACHERS' SALARIES AND OLD-AGE PENSIONS.

Rural teachers are well paid; reasons.—In Denmark, as elsewhere in Europe, teaching is as much a profession as law or medicine or theology. Every teacher is a professional teacher. Eminent preparation is required of all, but the State in return pays for the services in a way commensurate with the time and effort used in preparation. Every hamlet and city realizes that education is essential to success in life. Since the disastrous war with Prussia and Austria in 1864, Denmark has more than regained the population and wealth that were lost in that disaster, chiefly through its schoolmasters, who have been indefatigable in the educational campaigns which have placed the Kingdom well in the forefront of nations intellectually and industrially. The teachers are rewarded, furthermore, with high social ranking. Scholarship is respected and reverenced alike by

high and low; all classes look up to the teaching fraternity because of its importance to the State.

What the teachers' remuneration comprises.—The ordinance of 1908 made very satisfactory provisions for the care and keep of rural teachers. The following points are of particular interest:

1. Salary: "First teachers" and teachers of one-room schools are engaged at a beginning salary of not less than 900 kroner nor more than 1,400 kroner, to be paid monthly in advance by the commune. The State adds to this amount at the rate of 200 kroner each fourth year until a total of 1,000 kroner has been reached. In this way it becomes possible to draw 2,400 kroner per annum upon the completion of the twentieth school year.

"Second teachers" and women teachers are paid according to a similar sliding scale, although the beginning salary is smaller. The commune pays them not less than 700 kroner nor more than 900 kroner. The State thereafter makes specified increases.

Teachers in many "trading places," which in the United States would be rated as rural, get the same pay as the teachers of the large provincial towns. Men begin with 1,500 or 1,600 kroner and may get increases up to 2,800 or 3,000 kroner. Women begin with 1,400 or 1,500 kroner and may in time reach 1,900 or 2,000 kroner.[1] This can be seen at a glance from the following figures:

Salaries of rural teachers.

	Lower scale.	Higher scale.
Principals and teachers of one-room schools:	*Kroner.*	*Kroner.*
First four years	900	1,400
Fifth to eighth year	1,100	1,600
Ninth to twelfth year	1,300	1,800
Thirteenth to sixteenth year	1,500	2,000
Seventeenth to twentieth year	1,700	2,200
Following years	1,900	2,400
"Second teachers" and women teachers:		
First three years	700	900
Fourth to sixth year	850	1,050
Seventh to ninth year	1,000	1,200
Tenth to twelfth year	1,150	1,350
Thirteenth to fifteenth year	1,300	1,500
Sixteenth year (for men only)	1,500	1,700
After 20 years (for men)	1,700	1,900
After 20 years (for women)	1,500	1,700
Men teachers (trading places):		
First four years	1,500	1,600
Fifth to eighth year	1,700	1,800
Ninth to twelfth year	2,000	2,100
Thirteenth to sixteenth year	2,300	2,400
Seventeenth to twentieth year	2,500	2,700
Following years	2,800	3,000
Women teachers (trading places):		
First four years	1,400	1,500
Fifth to eighth year	1,500	1,600
Ninth to twelfth year	1,600	1,700
Thirteenth to sixteenth year	1,700	1,800
Seventeenth to twentieth year	1,800	1,900
Following years	1,900	2,000

[1] One krone is equivalent to about 26 cents.

2. House: All teachers are provided with comfortable houses. These are built and owned by the commune, which looks after the upkeep. If the home does not come up to the required standards, the teacher can have recourse to law. In a few instances, where it is necessary to procure accommodations outside of the school grounds, the commune pays the rent.

3. Fuel: Housing under the law includes all the fuel necessary to heat the house comfortably, including also what is necessary for kitchen purposes.

4. Garden: A well-planned and planted garden plays an important rôle in the teacher's remuneration. This ranges in size from one-half to one-third acre for the principal to one-eighth to one-twelfth acre for the other teachers. In case the lay of the land or consistency of the soil makes it impracticable to provide gardens, money ranging from something like 25 to 300 kroner may be accepted in lieu of them.

5. Perquisites: The old school "lots" mentioned above still furnish considerable income in a few sections. Here the teachers also receive a stated amount of fodder annually, enough to winter two cows and six sheep.

Finally, there are specific incomes from the positions of church chorister and organist, and church fees. The "first teacher" usually has charge of the choir, getting for his services 100 to 200 kroner. The "second teacher" generally plays the organ, which nets him 100 kroner or more.

To make this matter of remuneration as clear as possible, it may be well to use the following illustration taken from an average school near the center of the island of Fyen. The three teachers of the school made the following showing:

Salaries of teachers in a typical school.

	First teacher.	Second teacher.	Woman teacher.
	Kroner.	*Kroner.*	*Kroner.*
From commune	1,400	1,000	700
From State	1,000	1,000	600
House	480	300	300
Fuel	250	125	125
Garden	(½ A.) 150	(⅓ A.) 40	(⅓ A.) 40
Church	[1] 120	[2] 100	.....
Total	3,400	2,565	1,765

[1] As chorister. [2] As organist.

A good living for rural teachers.—A salary of 3,400 kroner amounts to about $920 in the American equivalent. This is a considerable sum as teaching goes. But if it is to be a just basis for comparison, the greater purchasing power of the Danish equivalent must be kept in mind. As things are to-day, the 3,400 kroner have a purchasing

power in Denmark equivalent to from $1,500 to $1,800 in the United States. This may be observed in the figures used in estimating the value of house rent and fuel. The seven-room modern house, for example, is figured at $10 per month only, while an equally good house in the United States would cost twice that much.

But to make the figures really effective, they might be compared with salaries paid in our own country, where the average annual salary of all teachers, rural and city, is now $485. Just what American rural teachers are getting can not be said with absolute exactness. But in 1910 this amounted to only $296.93, according to figures compiled by the writer from the reports of 30 States. The past three years have shown a material increase, so that now the amount is, no doubt, considerably above the $300 mark. Even then, it is scarcely more than one-third of what many teachers of one-room schools get in Denmark.

Old-age pensions.—These might also in full justice be counted as a part of the teacher's remuneration; they are such, only deferred. Full provision is made by the State to pension superannuated teachers and their widows and children under certain regulations. Under this category come also teachers who have become incapacitated through accident or disease during their years of service.

General regulations governing all pensions are these:

1. Regularly employed permanent teachers only are entitled to pensions. This excludes all assistant teachers, apprentice teachers, hour teachers, etc.

2. The applicant must have been regularly employed for at least five years when the application for pension is made. Exception may be made in a case where the applicant had held the same or a similar position as assistant teacher before being made permanent. In this way alone is it possible to obtain a pension in disregard of the five-year limit.

3. The applicant must be at least 30 years of age at the time of making application, and the cause for retirement can be no other than old age, constitutional weakness, sickness, and the like. Any teacher leaving the teaching profession to engage in other employment as a lifework will not be given consideration.

4. Exceptions to these regulations are made in the case of teachers who are obliged to discontinue their work on account of having contracted infectious tuberculosis. All such, no matter whether permanently employed or not, are entitled to an annual pension for life equivalent to two-thirds of the average income on their "living" for the last five years immediately prior to retiring.

Scale of pensions.—The size of the pension is based upon the entire "living" of the teacher, i. e., on his cash salary, house, fuel, and perquisites. It is not based on the last year's income, but upon the estimated average for the five years immediately before retiring.

Here follows the present scale: From 0 to 2 years' service above 5 years, one-tenth of the average income during these 5 years; from 2 to 4 years' service, three-tenths of the income; from 7 to 10, four-tenths; from 10 to 20, one-half; from 20 to 21, thirty-one sixtieths; from 21 to 22, thirty-two sixtieths; from 22 to 23, thirty-three

sixtieths; from 23 to 24, thirty-four sixtieths; from 24 to 25, thirty-five sixtieths; from 25 to 26, thirty-six sixtieths; from 26 to 27, thirty-seven sixtieths; from 27 to 28, thirty-eight sixtieths; from 28 to 29, thirty-nine sixtieths, and over 29, two-thirds.

Widows of teachers on the eligible list are entitled to an annual pension of one-eighth of the husband's average "living" during the last five years of his office. This rule holds good whether the husband dies while in the active service or after having been retired.

The children of the deceased are, strictly speaking, not entitled to pension, but under the ruling of the law of 1856 all the unconfirmed children of the deceased shall be cared for from a special fund set aside for this purpose. The care of these children, so far as pecuniary aid goes, is intrusted to the deanery school directory.

VI. HOW THE SCHOOLS ARE MAINTAINED.

General statement.—The Danish system of taxation for school purposes is based on the principle that the entire people is vitally interested in the education of every individual in the Kingdom. Education is both of national and local concern; therefore, both nation and local community must bear their proportionate share of the cost. As the result of a hundred years of careful effort, the system is now well balanced. The State for its part pays sufficiently to equalize educational advantages throughout the nation, and the smaller units pay enough to keep alive and foster local interest in school affairs and develop the greatest measure of local independence and self-reliance. The maintenance of the rural school may advantageously be discussed under three heads: (1) State aid, (2) permanent funds, and (3) local taxation.

State aid in school maintenance.—The General Government extends financial assistance in a number of ways to induce to greater educational effort and efficiency. The aid comes to the community as reward for good work already begun—work, sometimes voluntarily undertaken, and sometimes under the compulsion of legal enactment.

By all odds the largest State aid is for teachers' salaries. As stated elsewhere, the General Government obligates itself to pay all the increases in teachers' salaries above the initial salary paid by the communes.

Furthermore, one-half of the entire amount paid for old-age pensions comes from the general treasury. The balance is taken from the permanent *amt* fund.

According to the ordinance of 1908, the State shall extend annual aid to districts which have bonded themselves for the construction of new buildings in compliance of law. This aid shall in no case

exceed 450 kroner annually, and must be used only in paying interest and in reducing the face of the indebtedness.

Considerable sums are also used to purchase and maintain school libraries and teachers' libraries. The evening schools, too, of which many hundred are in operation in rural communities, are maintained through Government aid.

Finally, the State extends direct aid to needy communes, and even refunds one-half of the total amount that the permanent amt fund annually uses for needy communes within the amt. Just what per cent of the total amount of school maintenance is defrayed by the State is difficult to say, as there are no statistics available, but it is very considerable.

Permanent school funds.—As early as 1814 a permanent fund was organized, its chief aim being to extend aid to needy teachers. These funds came through direct amt taxes, through assessments on the teachers themselves, and in large part from the sale of certain school buildings and school lands no longer needed in the reorganized school system. In 1856 the teachers' aid feature was abolished, and the teachers were no longer expected to pay their quota to the fund. It became a permanent school fund, the purpose being to aid and promote education within the amt. The invested moneys now have their source in the sale of certain school "lots," in fines, and direct appropriations by the amt council. The fund is administered by the amt school directory in conjunction with the amt school council, which draws its membership from the regularly constituted amt council. This gives assurance of able administration of the funds.

The general purpose of the permanent amt fund is to equalize educational opportunities within the amt by extending aid to the several communes according to need. In addition, all State aid is paid directly into this fund, and from it to the several school districts.

One half the amount of the old-age pensions within the amt is defrayed from the permanent fund. The pay of certain provisional teachers not otherwise provided for is likewise drawn from this source. In addition to all this, the fund may aid in maintaining schools in household economics and evening schools, if there are sufficient funds on hand.

Local taxation.—The chief source of school maintenance is, after all, local taxation. The commune, with its several school districts is the basis. This would be a pretty small tax unit, and scarcely to be trusted with such important legislation, were it not that the communal council and school commission are guided closely by its deanery school directory and the ministry of education. As a matter of fact, national and amt aid depend almost solely upon the wisdom shown in voting and expending local funds. And any attempt at

unwise expenditure would immediately be checked by higher authority, just as wise and liberal expenditure receives its encouragement and reward in the form of State aid.

The commune is charged with the general maintenance of the local schools, such as erecting the necessary buildings and keeping them in repair, furnishing the necessary school furniture, and paying the original salaries of permanent teachers and regular assistant teachers.

VII. BRIEF SUMMARY OF IMPRESSIONS, WITH SOME APPLICATIONS TO AMERICAN LIFE.

General statement.—The elementary rural schools of Denmark have reached their present state of high efficiency as the result of many years of painful development. The fact that the Danish people are homogeneous and a small nation has naturally aided in the process of school evolution. To this may be added that dire necessity has, several times within the past hundred years, acted as a necessary spur and made the people realize the necessity of good schools. Such things as these can readily explain the present satisfactory school conditions.

On the other hand, there are reasons enough why rural school conditions in the United States are not so satisfactory as they are in an old agricultural nation like Denmark. Ours is a great nation in the process of making. At the present time there is an unprecedented shifting about, and changes are constantly going on in the rural population. Many of the people have been seeking the new lands of the West; others have been moving to the large villages, and some to the cities, compelled by the modern industrialism. Much of this shifting process has been wholesome, as it has rid agricultural communities of a part of the people who are city-minded.

But in this process of reorganization the rural schools and many other factors in country life have suffered loss. The schools have been unable for good reasons to keep pace with the evolutionary changes. Many of them, indeed, have become retarded and are marking time, and are therefore unable to cope with the new agricultural conditions. The most hopeful thing about this most difficult situation is, no doubt, the fact that educationists all over the country are facing the present needs with courage and determination to better the schools and put them in condition to meet the new demands upon them in the shortest time possible.

In some sections of the United States, the small rural schools are bound to continue for an indefinite time as the only schools, chiefly because geographical conditions will permit no change. Elsewhere

throughout the country great changes are already taking place in school organization. This began where need compelled, or conditions for reorganization were properly advanced. Thousands of country communities have already centralized and consolidated the small schools, or are in the process of consolidating them, at natural rural centers, grading the new work thoroughly and, in some instances, adding as many as four years of agricultural high-school work.

The new schools will be pretty sure to accomplish for the country communities what the old have been incapable of doing; namely, to train the boys to become scientific farmers and the girls as practical and satisfied wives for the farm homes. From these schools are beginning to come many influences to organize the country people on a more permanent social-economic basis.

A study of Danish rural schools of value to American education.—It would be unwise to transplant to the United States educational systems taken from European countries; yet very often these countries can teach lessons of greatest value. The rural schools of Denmark have accomplished certain things that American rural schools have failed to attain. In part, these failures are explainable in natural causes over which men have no control; but very often they are explainable in a degree of unnecessary lack of organization in school policy that might have been forestalled had there been a more vital policy of progressive forethought in educational matters. A more widespread knowledge of school conditions prevailing in the best of the older European States would have tended to furnish the proper stimulus to modify these conditions.

A few of the salient facts of the Danish schools, as studied above, are enumerated herewith. Further comments on these are entirely unnecessary, as their application to American schools may be seen at a glance. Some of these things we are already approximating. Some of them can not fail to be of value to the educator if applied to American conditions; indeed, it may be stated with some confidence that a number of the propositions set forth below must be accepted and incorporated into the school system—if this has not already been done—before the schools can do their most efficient work.

(1) In Denmark teaching is a life profession, well paid, dignified, and held in highest esteem.

(2) The Government requires professional preparation of all, without exception; but in return it rewards the teachers in a manner commensurate with the time and money put into the preparation.

(3) The teachers are trained for community leadership. Long tenures in the same parish, together with permanent housing, make this practicable and easy.

(4) Men teachers are in a majority in all the schools. This is made possible through permanent "living," homes, gardens, etc.

(5) The schools are organized and administered under a system which permits little loss in energy and time and no waste of money.

(6) School supervision is fairly close, but would be improved with more specially trained supervisors.

(7) Compulsory attendance laws are rigidly enforced. Only a fraction of 1 per cent of children of school age were not in school the past year.

(8) The schools are open at least 246 days in the year. The school life is practically continuous, although the school days are shorter, and often fewer per week, than in the United States.

(9) The course of study is especially adapted to country needs. Natural history or nature study is fundamental in the course.

(10) The underlying elements in education—i. e., language, mathematics, history, etc.—are taught in a thorough manner, and with very few "fads" and "frills."

(11) Gymnastics and physical education play a big rôle in all the schools. The same is true of music.

(12) The schools excel in handwork for girls, but offer very little manual training for boys, and practically nothing in household economics.

(13) The methods of teaching are uniformly good, the result of long preparatory experience and training.

(14) Textbooks are used as mere "leading threads." Much is left to the ingenuity of the teachers.

(15) Artificial division into units for school organization count for very little. An interrelated system of school directories and commissions administers school affairs according to plans that make impossible an undue focalization on local interests solely.

(16) The division of school taxes into national, amt, and local taxes seems eminently fair, and properly balances national interest with local initiative.

BULLETIN OF THE BUREAU OF EDUCATION.

[NOTE.—With the exceptions indicated, the documents named below will be sent free of charge upon application to the Commissioner of Education, Washington, D. C. Those marked with an asterisk (*) are no longer available for free distribution, but may be had of the Superintendent of Documents, Government Printing Office, Washington, D. C., upon payment of the price stated. Remittances should be made in coin, currency, or money order. Stamps are not accepted. Documents marked with a dagger (†) are out of print.]

1906.

†No. 1. Education bill of 1906 for England and Wales as it passed the House of Commons. Anna T. Smith.
*No. 2. German views of American education, with particular reference to industrial development. William N. Hailmann. 10 cts.
*No. 3. State school systems: Legislation and judicial decisions relating to public education, Oct. 1, 1904, to Oct. 1, 1906. Edward C. Elliott. 15 cts.

1907.

†No. 1. The continuation school in the United States. Arthur J. Jones.
*No. 2. Agricultural education, including nature study and school gardens. James R. Jewell. 15 cts.
†No. 3. The auxiliary schools of Germany. Six lectures by B. Maennel.
†No. 4. The elimination of pupils from school. Edward L. Thorndike.

1908.

†No. 1. On the training of persons to teach agriculture in the public schools. Liberty H. Bailey.
*No. 2. List of publications of the United States Bureau of Education, 1867-1907. 10 cts.
*No. 3. Bibliography of education for 1907. James Ingersoll Wyer, jr., and Martha L. Phelps. 10 cts.
†No. 4. Music education in the United States; schools and departments of music. Arthur L. Manchester.
*No. 5. Education in Formosa. Julean H. Arnold. 10 cts.
*No. 6. The apprenticeship system in its relation to industrial education. Carroll D. Wright. 15 cts.
*No. 7. State school systems: II. Legislation and judicial decisions relating to public education, Oct. 1, 1906, to Oct. 1, 1908. Edward C. Elliott. 30 cts.
†No. 8. Statistics of State universities and other institutions of higher education partially supported by the State, 1907-8.

1909.

*No. 1. Facilities for study and research in the offices of the United States Government in Washington, Arthur T. Hadley. 10 cts.
No. 2. Admission of Chinese students to American colleges. John Fryer.
*No. 3. Daily meals of school children. Caroline L. Hunt. 10 cts.
†No. 4. The teaching staff of secondary schools in the United States; amount of education, length of experience, salaries. Edward L. Thorndike.
No. 5. Statistics of public, society, and school libraries in 1908.
*No. 6. Instruction in the fine and manual arts in the United States. A statistical monograph. Henry T. Bailey. 15 cts.
No. 7. Index to the Reports of the Commissioner of Education, 1867-1907.
*No. 8. A teacher's professional library. Classified list of 100 titles. 5 cts.
*No. 9. Bibliography of education for 1908-9. 10 cts.
No. 10. Education for efficiency in railroad service. J. Shirley Eaton.
*No. 11. Statistics of State universities and other institutions of higher education partially supported by the State, 1908-9. 5 cts.

1910.

†No. 1. The movement for reform in the teaching of religion in the public schools of Saxony. Arley B. Show.
No. 2. State school systems: III. Legislation and judicial decisions relating to public education, Oct. 1, 1908, to Oct. 1, 1909. Edward C. Elliott.
†No. 3. List of publications of the United States Bureau of Education, 1867-1910.
*No. 4. The biological stations of Europe. Charles A. Kofoid. 50 cts.
*No. 5. American schoolhouses. Fletcher B. Dresslar. 75 cts.
†No. 6. Statistics of State universities and other institutions of higher education partially supported by the State, 1909-10.

1911.

*No. 1. Bibliography of science teaching. 5 cts.
No. 2. Opportunities for graduate study in agriculture in the United States. A. C. Monahan.
*No. 3. Agencies for the improvement of teachers in service. William C. Ruediger. 15 cts.
*No. 4. Report of the commission appointed to study the system of education in the public schools of Baltimore. 10 cts.
*No. 5. Age and grade census of schools and colleges. George D. Strayer. 10 cts.
†No. 6. Graduate work in mathematics in universities and in other institutions of like grade in the United States.
*No. 7. Undergraduate work in mathematics in colleges and universities. 5 cts.
*No. 8. Examinations in mathematics, other than those set by the teacher for his own classes. 5 cts.
No. 9. Mathematics in the technological schools of collegiate grade in the United States.
†No. 10. Bibliography of education for 1909–10.
†No. 11. Bibliography of child study for the years 1908–9.
*No. 12. Training of teachers of elementary and secondary mathematics. 5 cts.
*No. 13. Mathematics in the elementary schools of the United States. 15 cts.
*No. 14. Provision for exceptional children in the public schools. J. H. Van Sickle, Lightner Witmer, and Leonard P. Ayres. 10 cts.
*No. 15. Educational system of China as recently reconstructed. Henry E. King. 15 cts.
*No. 16. Mathematics in the public and private secondary schools of the United States. 15 cts.
†No. 17. List of publications of the United States Bureau of Education, October, 1911.
*No. 18. Teachers' certificates issued under general State laws and regulations. Harlan Updegraff. 20 cts.
No. 19. Statistics of State universities and other institutions of higher education partially supported by the State, 1910–11.

1912.

*No. 1. A course of study for the preparation of rural-school teachers. Fred Mutchler and W. J. Craig. 5 cts.
*No. 2. Mathematics at West Point and Annapolis. 5 cts.
*No. 3. Report of committee on uniform records and reports. 5 cts.
*No. 4. Mathematics in technical secondary schools in the United States. 5 cts.
*No. 5. A study of expenses of city school systems. Harlan Updegraff. 10 cts.
*No. 6. Agricultural education in secondary schools. 10 cts.
*No. 7. Educational status of nursing. M. Adelaide Nutting. 10 cts.
*No. 8. Peace day. Fannie Fern Andrews. [Later publication, 1913, No. 12.] 5 cts.
*No. 9. Country schools for city boys. William S. Myers. 10 cts.
*No. 10. Bibliography of education in agriculture and home economics. 10 cts.
†No. 11. Current educational topics, No. I.
†No. 12. Dutch schools of New Netherland and colonial New York. William H. Kilpatrick.
*No. 13. Influences tending to improve the work of the teacher of mathematics. 5 cts.
*No. 14. Report of the American commissioners of the international commission on the teaching of mathematics. 10 cts.
†No. 15. Current educational topics, No. II.
*No. 16. The reorganized school playground. Henry S. Curtis. 5 cts.
*No. 17. The Montessori system of education. Anna T. Smith. 5 cts.
*No. 18. Teaching language through agriculture and domestic science. M. A. Leiper. 5 cts.
*No. 19. Professional distribution of college and university graduates. Bailey B. Burritt. 10 cts.
*No. 20. Readjustment of a rural high school to the needs of the community. H. A. Brown. 10 cts.
*No. 21. Urban and rural common-school statistics. Harlan Updegraff and William R. Hood. 5 cts.
No. 22. Public and private high schools.
No. 23. Special collections in libraries in the United States. W. Dawson Johnston and Isadore G. Mudge.
*No. 24. Current educational topics, No. III. 5 cts.
†No. 25. List of publications of the United States Bureau of Education, 1912.
†No. 26. Bibliography of child study for the years 1910–1911.
No. 27. History of public-school education in Arkansas. Stephen B. Weeks.
*No. 28. Cultivating school grounds in Wake County, N. C. Zebulon Judd. 5 cts.
No. 29. Bibliography of the teaching of mathematics, 1900-1912. David Eugene Smith and Charles Goldziher.
No. 30. Latin-American universities and special schools. Edgar E. Brandon.
No. 31. Educational directory, 1912.
No. 32. Bibliography of exceptional children and their education. Arthur MacDonald.
†No. 33. Statistics of State universities and other institutions of higher education partially supported by the State, 1912.

1913.

No. 1. Monthly record of current educational publications, January, 1913.
*No. 2. Training courses for rural teachers. A. C. Monahan and R. H. Wright. 5 cts.
*No. 3. The teaching of modern languages in the United States. Charles H. Handschin. 15 cts.
*No. 4. Present standards of higher education in the United States. George E. MacLean. 20 cts.
*No. 5. Monthly record of current educational publications. February, 1913. 5 cts.

*No. 6. Agricultural instruction in high schools. C. H. Robison and F. B. Jenks. 10 cts.
*No. 7. College entrance requirements. Clarence P. Kingsley. 15 cts.
*No. 8. The status of rural education in the United States. A. O. Monahan. 15 cts.
*No. 9. Consular reports on continuation schools in Prussia. 5 cts.
*No. 10. Monthly record of current educational publications, March, 1913. 5 cts.
*No. 11. Monthly record of current educational publications, April, 1913. 5 cts.
*No. 12. The promotion of peace. Fannie Fern Andrews. 10 cts.
*No. 13. Standards and tests for measuring the efficiency of schools or systems of schools. Report of the committee of the National Council of Education. George D. Strayer, chairman. 5 cts.
No. 14. Agricultural instruction in secondary schools.
*No. 15. Monthly record of current educational publications, May, 1913. 5 cts.
*No. 16. Bibliography of medical inspection and health supervision. 15 cts.
*No. 17. A trade school for girls. A preliminary investigation in a typical manufacturing city, Worcester, Mass. 10 cts.
*No. 18. The fifteenth international congress on hygiene and demography. Fletcher B. Dresslar. 10 cts.
*No. 19. German industrial education and its lessons for the United States. Holmes Beckwith. 15 cts.
†No. 20. Illiteracy in the United States.
†No. 21. Monthly record of current educational publications, June, 1913.
*No. 22. Bibliography of industrial, vocational, and trade education. 10 cts.
*No. 23. The Georgia club at the State Normal School, Athens, Ga., for the study of rural sociology. E. C. Branson. 10 cts.
*No. 24. A comparison of public education in Germany and in the United States. Georg Kerschensteiner. 5 cts.
*No. 25. Industrial education in Columbus, Ga. Roland B. Daniel. 5 cts.
*No. 26. Good roads arbor day. Susan B. Sipe. 10 cts.
*No. 27. Prison schools. A. C. Hill. 10 cts.
*No. 28. Expressions on education by American statesmen and publicists. 5 cts.
*No. 29. Accredited secondary schools in the United States. Kendric C. Babcock. 10 cts.
*No. 30. Education in the South. 10 cts.
*No. 31. Special features in city school systems. 10 cts.
No. 32. Educational survey of Montgomery County, Md.
†No. 33. Monthly record of current educational publications, September, 1913.
*No. 34. Pension systems in Great Britain. Raymond W. Sies. 10 cts.
*No. 35. A list of books suited to a high-school library. 15 cts.
*No. 36. Report on the work of the Bureau of Education for the natives of Alaska, 1911-12. 10 cts.
No. 37. Monthly record of current educational publications, October, 1913.
†No. 38. Economy of time in education.
No. 39. Elementary industrial school of Cleveland, Ohio. W. N. Hailmann.
*No. 40. The reorganized school playground. Henry S. Curtis. 10 cts.
No. 41. The reorganization of secondary education.
No. 42. An experimental rural school at Winthrop College. H. S. Browne.
*No. 43. Agriculture and rural-life day; material for its observance. Eugene C. Brooks. 10 cts.
*No. 44. Organized health work in schools. E. B. Hoag. 10 cts.
No. 45. Monthly record of current educational publications, November, 1913.
*No. 46. Educational directory, 1913. 15 cts.
*No. 47. Teaching material in Government publications. F. K. Noyes. 10 cts.
*No. 48. School hygiene. W. Carson Ryan, jr. 15 cts.
No. 49. The Farragut School, a Tennessee country-life high school. A. C. Monahan and Adams Phillips.
No. 50. The Fitchburg plan of cooperative industrial education. M. R. McCann.
†No. 51. Education of the immigrant.
*No. 52. Sanitary schoolhouses. Legal requirements in Indiana and Ohio. 5 cts.
No. 53. Monthly record of current educational publications, December, 1913.
No. 54. Consular reports on industrial education in Germany.
No. 55. Legislation and judicial decisions relating to education, October 1, 1909, to October 1, 1912. James C. Boykin and William R. Hood.
*No. 56. Some suggestive features of the Swiss school system. William Knox Tate. 25 cts.
No. 57. Elementary education in England, with special reference to London, Liverpool, and Manchester. I. L. Kandel.
No. 58. Educational system of rural Denmark. Harold W. Foght.
No. 59. Bibliography of education for 1910-11.
No. 60. Statistics of State universities and other institutions of higher education partially supported by the State, 1912-13.

1914.

*No. 1. Monthly record of current educational publications, January, 1914. 5 cts.
No. 2. Compulsory school attendance.
No. 3. Monthly record of current educational publications, February, 1914.
No. 4. The school and the start in life. Meyer Bloomfield.

No. 5. The folk high schools of Denmark. L. L. Friend.
No. 6. Kindergartens in the United States.
No. 7. Monthly record of current educational publications, March, 1914.
No. 8. The Massachusetts home-project plan of vocational agricultural education. R. W. Stimson.
No. 9. Monthly record of current educational publications, April, 1914.
No. 10. Physical growth and school progress. B. T. Baldwin.
No. 11. Monthly record of current educational publications, May, 1914.
No. 12. Rural schoolhouses and grounds. F. B. Dressler.
No. 13. Present status of drawing and art in the elementary and secondary schools of the United States. Royal B. Farnum.
No. 14. Vocational guidance.
No. 15. Monthly record of current educational publications. Index.
No. 16. The tangible rewards of teaching. James C. Boykin and Roberta King.
No. 17. Sanitary survey of the schools of Orange County, Va. Roy K. Flannagan.
No. 18. The public school system of Gary, Ind. William P. Burris.
No. 19. University extension in the United States. Louis E. Reber.
No. 20. The rural school and hookworm disease. J. A. Ferrell.
No. 21. Monthly record of current educational publications, September, 1914.
No. 22. The Danish folk high schools. H. W. Foght.
No. 23. Some trade schools in Europe. Frank L. Glynn.