Cultural Ecology of an Agricultural Implement in Carpathian Europe

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In his article the author presents an important agricultural implement of Carpathian Europe: the hayrakes. From typological view these are almost identical with the hayrakes of Western Europe. They are not only used as tools, but fulfill a social function as well. Decorative and "rattling" rakes are eventually used as gifts. The women will guard their decorated rake lifelong. Among the Hungarians a rake is carved on the grave-post of a woman distinguished in haywork. The hayrake plays various roles in the folk-belief, so for instance, when hanging on the wall of the stable, it will keep away the witches. The functional analysis of such an agricultural implement leeds us to the result, that the terminology "material culture" and "spiritual culture" is not correct. In peasant farming of Carpathian Europe the stubble-rakes and chaff-rakes are playing a major role, while a special small rake is being used for sheath-binding. The rakes are made partly at home, but there are also some villages where rakes and other farming necessities are produced and carried away for sale in remote regions.
The author tries to demonstrate the geographical area of the different rakes and points out, that geographical diffusion reflects historicity. On the other hand, geographical diffusion is impaired by social and ecological impediments.
The present paper is referring to an earlier article by Bjarne Stoklund (Ethnological Interpretations of Implements. The Hayrake as an Example. Ethnologia Europaea XX: 5–14).

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The article published in Ethnologia Europaea by Bjarne Stoklund on the hayrake as well as the forms, the area, the use and the origin of this agricultural implement commands attention indeed (Stoklund 1990: 5–14). On the following pages I should like to complete it with some thoughts by presenting the rakes used in Carpathian Europe.

I would begin by expressing my opinion on the terminology "material culture", repeatedly used by B. Stoklund as well (Stoklund 1990: 6, 11). Now, I think, "material culture" as such does not exist. May I refer to what a great master of our discipline, Wilhelm Koppers, has said already a long time ago: "Es bedarf nun eines längeren Beweises gewiss nicht, dass der Ausdruck "materielle Kultur" eigentlich eine *contradictio in adiecto* in sich schliesst: denn was rein materiell, ist nicht kulturell, was schon kulturell, ist nicht mehr rein materiell. Eine rein materielle Kultur gibt es also nicht, und der Ausdruck ist somit, wenn man ihn überhaupt anwenden will, in einem abgeschwächten Sinne zu verstehen" (Schmidt-Koppers 1924: 394). I am convinced that it would be most useful, if ethnologists would relieve their vocabulary of this terminology (which Soviet ethnography also endeavoured to propagate). The most simple prehistorical stone-tool, the stone-hatchet of Australian natives, denies the very existence and the terminology of "material culture." The stone-implements have various functions: cultic acts and magics are attached to them, they bear marks

of the aptitude of their producer and user, show the way of thinking and the activities of man, etc.

But let us return to the rakes! They are used not only for working, but express human feelings and are used for magics as well. In Pomerania (Germany) the decorated rake is a love present. There have been villages where in former times every girl received a decorated rake, and the lads rivalled with each other on who will give the most beautiful rake to his sweetheart (Erich-Beitl 1936: 280). In German literature these rakes are known as bride-rakes (German: *Brautharke*). They manifest that the scyther and the female lifter (sheaf-binder) are not only a working pair, but also a pair of lovers (Weber-Kellermann 1965: 332). Ingeborg Weber-Kellermann publishes further plentiful observations about decorative rakes as social symbols.

Painted and carved rakes are used by the Lithuanians and Russians (Haberlandt 1926: 352). Painted rakes are mentioned in Carinthia and other Austrian regions (Moser 1971: Fig. 2). Rakes decorated with carved, painted and burnt motives are known among the Slovaks (Hyčko 1973: 32, 53). Similar Hungarian rakes will be treated later, but it should be mentioned here, that the Hungarians use rakes also as magic implements. Suspended on the stable wall, the stubble-rake keeps away the witches from the animals (Kopács, County Baranya). The person carrying a rake-tooth in his pocket or bag will be avoided by the witches. In the night of St. George's day (April 24) a hayrake is put before the kitchen door to keep away the witches from the house (Panyola, County Szatmár). It is not advisable to leave the hayrake on the meadow with its teeth upwards, because the Blessed Virgin will begin to weep (Mátra region), something will sting God in His side (County Zala, Bödei 1940: 104). It brings luck if a snake is caught by the rake-teeth during hay-gathering: the girl will marry before long, the sick person recovers (Gyimes, Transylvania). The broken rake must not be burnt, or else the yield of hay will be poor (Kalotaszeg). The manifold German creeds will not be repeated here; they can be read in Handwörterbuch des Deutschen Aberglaubens, Vol. III (col. 1468–69).

All this proves that even in case of a simple agricultural implement the "material culture" is out of question.

B. Stoklund treats repeatedly the geographical spread, which is not sufficiently appreciated by actual European ethnology (cf. e.g. the trend of H. Bausinger). Already several decades ago R. H. Lowie wrote this: "When we do not know the distribution of a phenomenon, we know nothing that is theoretically significant." These were the words which have infuriated B. Malinowski (Lowie 1951: 24). Geographical distribution includes historicity and contributes to relative chronology as well as to our knowledge on the beginnings, the routes and paths of cultural phenomena and on relict areas. Geographical distribution is also connected with ecological conditions, as pointed out by B. Stoklund, saying that wood determines the form: "... We primarily find the blade-handled rake in the conifer region, while the fork-handled and bow-rakes belong to the regions of deciduous forest and plains" (Stoklund 1990: 13). Essentially similar conclusions were drawn earlier by O. Moser, who said that in Burgenland and Styria (Austria) the use of the fork-rake diminished, because the area of broadleafed forests was reduced. This is confirmed by terminology. The name of the hayrake's handle – *Furkel, Zwiesel* 'fork, fork-shaped' – is known on a much larger area than the fork-rake itself (Moser 1971: 31, 34–36). An important role in the distribution of agricultural implements is played by seasonal workers, by villages specialized on the production of rakes, forks, scythe handles etc., seasonal workers acting also as itinerant traders as well as by fairs and markets. Many aspects of this question have been already explored by German and Austrian ethnologists (Weber-Kellermann 1965: 287–308; Wiegelmann 1969: 249–258; Moser 1971: 12–18).

We must know, however, that the cultural phenomena – whether ideas, thoughts, customs or objects – do not spread equally. Geographical distribution has its specific social obstacles. Useful and practical innovations, objects and manners will be sooner accepted by

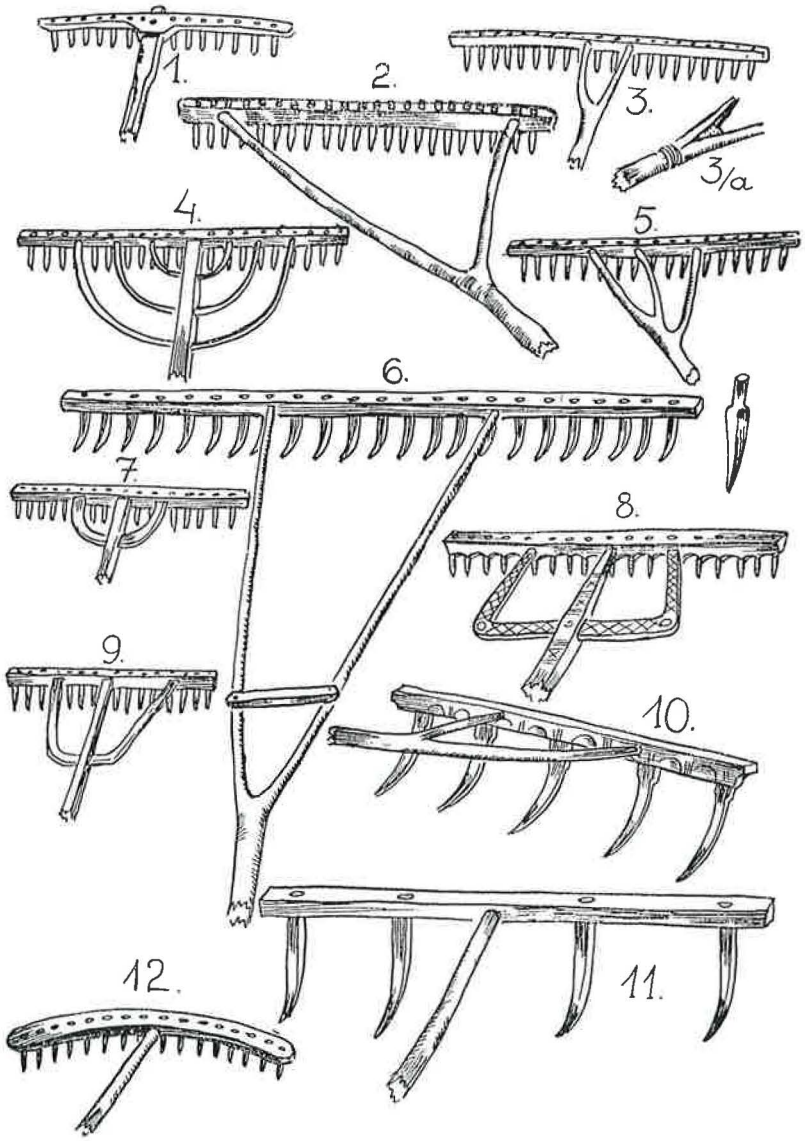

Fig. 1. Hungarian raketypes according to Questionnaire of the Hungarian Ethnographical Museum, Budapest, Hungary.
1. Gutorföld, County Zala.
2. Rimócz, County Nógrád.
3. Igriczi, County Borsod.
3a. Panyola, County Szatmár.
4. Siklód, Transylvania.
5. Cserépfalu, County Borsod.
6. Gádoros, County Békés.
7. Mátraderecske, County Heves.
8. Lövéte, Transylvania.
9. Zabola, Transylvania.
10. Nagyszénás, County Békés.
11. Apátfalva, County Csanád.
12. Gellénháza. County Zala.

wealthy peasants than by the poorer class. In the Hungarian village we can see (in fact, we could see before the World War II) in the farm of a wealthy peasant as many as three or four different rakes, while the cottar has only a single small rake to keep his courtyard in order. The Roumanian shepherd (Oaş Mountains) has always a hayrake near his hut, because he is mowing grass for the winter forage of his flock. In the Hortobágy-steppe the Hungarian shepherd does never mow the grass of the summer pasture and thus needs no rake. In fact, he cannot mow properly. "The scythe is good for the peasant", says he. At the beginning of this century the system of extended families still existed in Hungary (Mátra Mountains, County Baranya). Three or four women belonged to an extended family and each one had her own hayrake, with her mark of ownership carved in. Besides, their personal property included the hayfork, the hoe, the distaff, the stool, the body-clothing and the prayerbook.

Already at the beginning of the century, Hungarian ethnologists have started to ex-

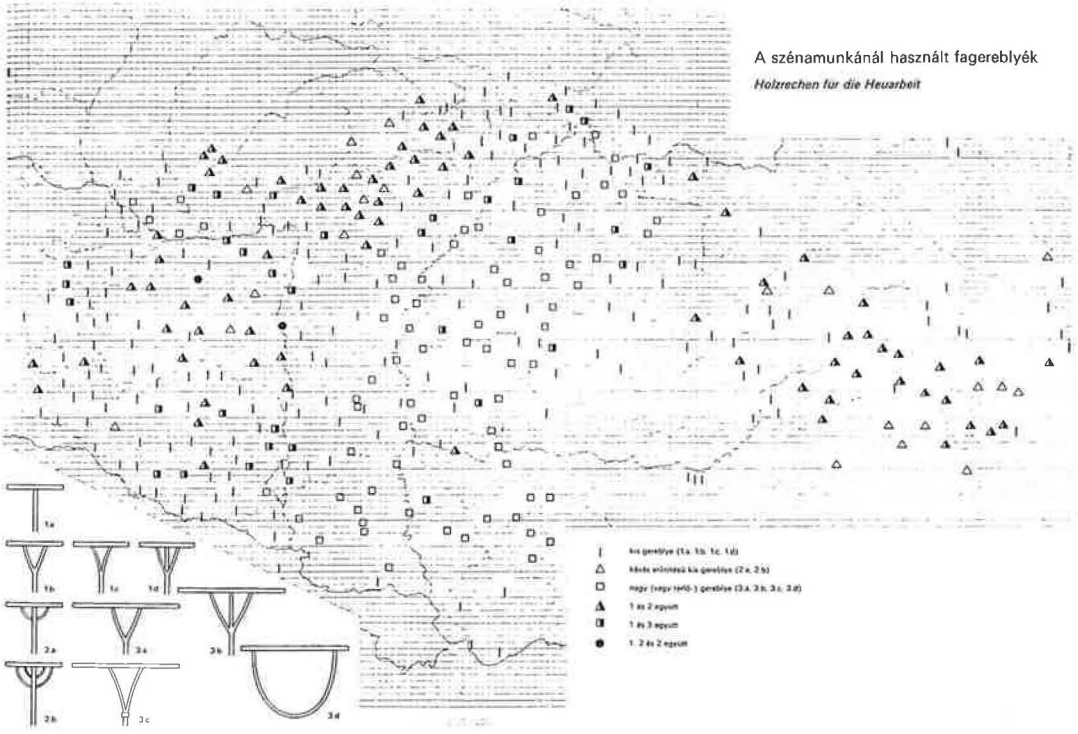

Fig. 2. Hayrake map of the Atlas of Hungarian Folk Culture, Map Nr. 109.

plore the fork, the rake, the scythe, the sickle and other agricultural implements (Bátky 1906: 30–35). As for myself, I have studied in 1938/1939 in Stockholm by the side of Professors Sigurd Erixon and Gerhard Lindblom, as well as in the Nordiska Museum. After returning to Hungary, I worked in the Ethnographical Museum, Budapest, and, following the Swedish methods, started the publication of a series of questionnaires. Questionnaire No. 1 (1938) calls the attention to the exploration of the distribution and the use of rake-types. After the presentation of the familiar Hungarian types (Fig. 1) the questionnaire included the following items, i.e. questions to be answered (here a short summary thereof): Name of the rake producers, production technique, utilization (sale) of the rakes, role of the itinerant traders and of fairs, name of the rake and of its parts, hay-, stubble-, chaff- and other rakes. Use of the rakes. Rakes for men and for women, property marks on the rakes. Rakes of peasant farms, seasonal workers and manorial estates. Superstitions connected with rakes, the function of rakes in folk-customs (the rake as love present), decorated rakes. A large number of questionnaires were sent to teachers, students and peasants.

Due to war circumstances, we received but a few adequate answers to the questionnaires. Shortly afterwards I had to leave the Ethnographical Museum, being appointed professor at the University of Kolozsvár (Transylvania), where I had other tasks to resolve.

While gathering the data to the Atlas of Hungarian Folk Culture, we paid much attention to the exploration of rakes, too. The compilation of the Atlas was directed by Professor Jenő Barabás (Eötvös-University, Budapest), while the hayrake types were worked up by Lajos Szolnoky (Barabás 1987. Vol. I. Map No. 109).

As shown by the hayrake map of the Atlas of Hungarian Folk Culture (Fig. 2), the one-piece straight-handled (Figs 1:1, 11, 12), the fork- (Figs 1:2, 3, 10; 4) and the split-handled hayrakes (Figs 1:3a; 5, 6, 8) are known all over the Hungarian ethnical area. The fork-rake can be

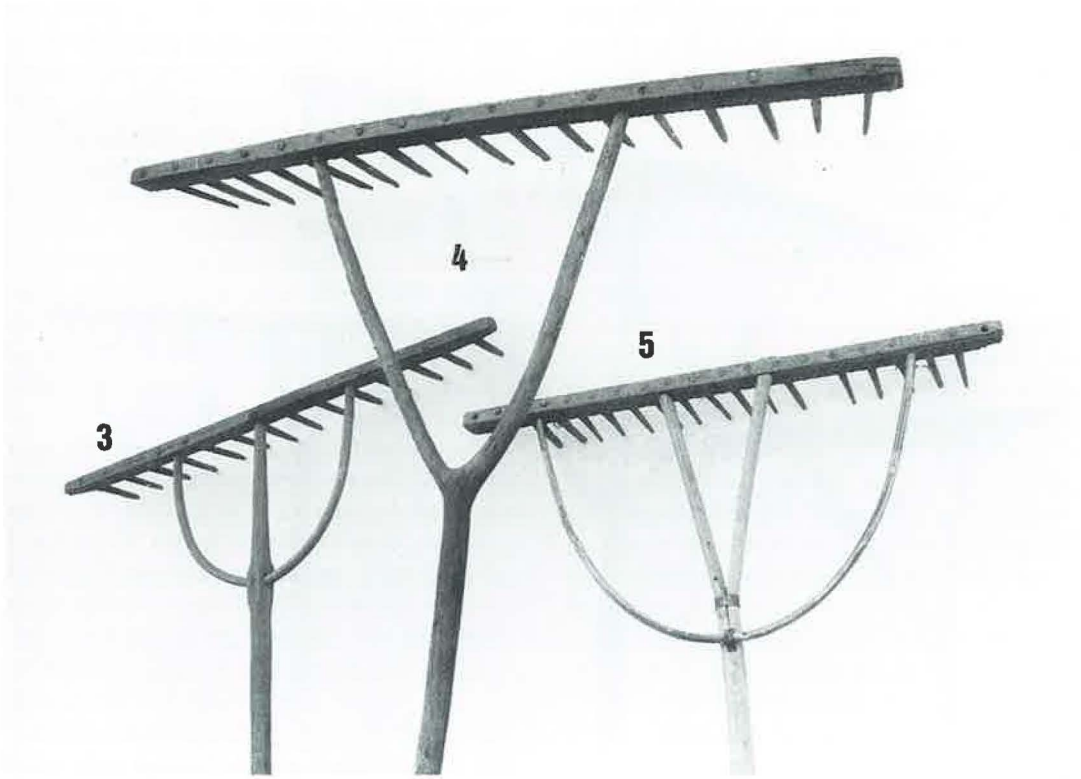

Fig. 3. Hungarian bow-rake. County Vas, Hungary. – Fig. 4. Hungarian fork-rake. County Vas, Hungary. – Fig. 5. Hungarian split-handled rake with bow. County Vas, Hungary. Collection of Open-Air Ethnological Museum, Szentendre, Hungary. Photo Péter Deim.

also three-branched, but this form is rather rare (Figs 1:5; 7). In Northern Hungary the above mentioned three forms often occur simultaneously in one and the same village, whereas in other regions the three types vary in time. The fork-rake, that was used earlier in Transdanubia, was replaced since the beginning of the century by the split-handled rake, because the wood required for the handle (hazel, dogwood) was hardly available by that time. In the Zemplén Mountains, where there is more than enough of the right wood, the split-handled rake is not being made in Hungarian villages, but only the fork-rake (Balassa 1964: 145). These three forms are used by the Slovaks as well, although the split-handled rake is the most widely spread type (Hyčko 1973: 31). The blade-handled rake (Fig. 1:1, German *Blattrechen*), where the end of the handle is expanded into a blade which is embedded in the head, is known so far only in County Zala, Transdanubia (yard-rake, Bödei 1940: 101, 102). A. Paládi-Kovács supposes that this type may occur or actually did occur at the beginning of the century in Western Transdanubia (Paládi-Kovács 1960: 260). This is quite possible, since at the beginning of the century many forks and rakes have been imported from the Alps to this region (County Zala) for the peasants (Bellosics 1911: 260–267). Unfortunately the details are unknown. It should not be ignored either, that westwards from the Hungarian ethnical region, in Austria, the split-handled rake is the characteristic type.

Straight-handled, fork- and split-handled hayrakes were made in some German villages of the Mecsek Mountains (South-Eastern Transdanubia). The rakes and other agricultural implements were transported by carts into the villages of the Counties Tolna, Somogy and Baranya (Atlas of Hungarian Folk Culture,

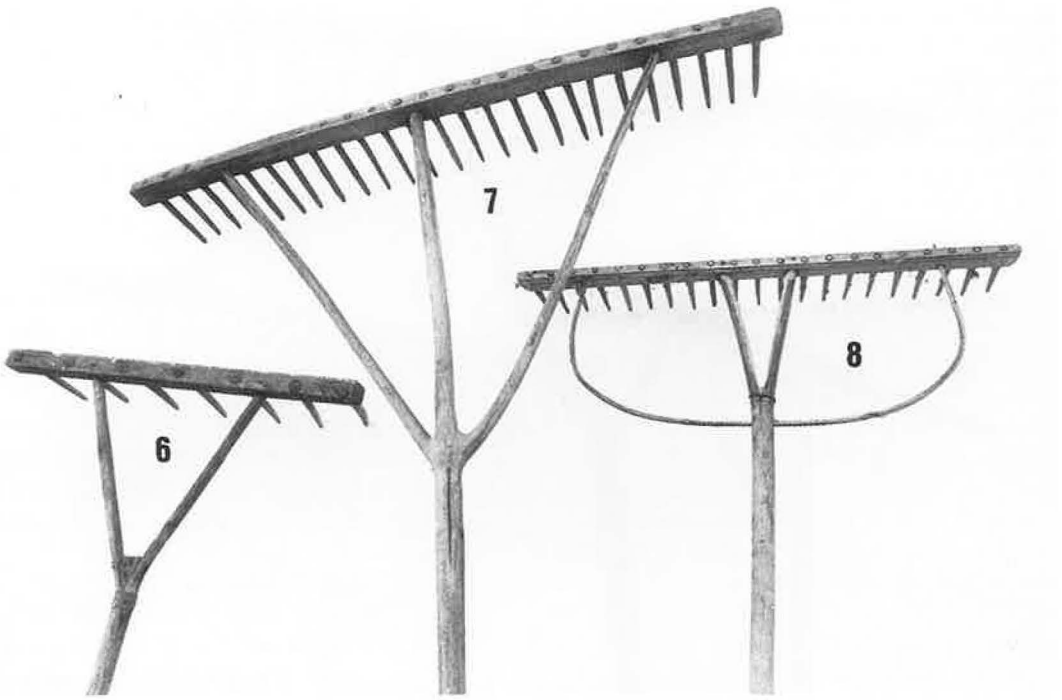

Fig. 6. Hungarian split-handled rake. Szentbékkála, County Veszprém, Hungary. – Fig. 7. Hungarian three-branched fork-rake. Nagyrákos, County Vas, Hungary. – Fig. 8. Hungarian split-handled rake with bow. County Vas, Hungary. Collection of Open-Air Ethnographical Museum, Szentendre, Hungary. Photo Péter Deim.

Vol. II. Budapest 1987. Map 108). Some rake-makers went also to the southern part of the Counties Veszprém and Fejér, where rakes made in the Bakony Mountains were also sold. Into County Baranya the Croats also brought rakes from Slavonia, where the inhabitants of the village Orahovicza were engaged in the production of agricultural implements because of the poor soil of their fields (Gaul 1902: 19).

The bow-rake – with one or two-four bows – occurs very frequently in Transdanubia, Transylvania, as well as in present Northern Hungary (Mátra and Bükk Mountains) and in the neighbouring Slovakia (Fig. 1: 4, 7, 9; Figs 3, 5, 8). Together with other agricultural implements these rakes are made in the Bakony Mountains (Transdanubia) in villages inhabited mainly by Germans and Slovaks (Bakonybél, Herend, Lókut, Kislőd, Eplény, Ugod etc.). The English physician R. Bright was travelling in 1815 in the Bakony Mountains and described the amazing skill of the producers of forks, rakes and other agricultural tools, which they carry as far as Transylvania and the surroundings of Vienna for sale (Hegyi 1978: 86). In the years 1940–1944 the inhabitants of the village Bakonybél made yearly 40–50 000 forks, 15 000 rakes, 4 000 shovels and 5 000 yokes, while the output of Lókut amounted to 100 000 table-spoons (Vajkai 1959b: 29–30).

The home-workers producing agricultural implements knew very well, which variants were used by the peasants of the different regions. From Szentgál and other villages of the Bakony Mountains they carried fork-rakes to the Balaton region and the Counties Zala, Vas, Sopron, whereas they offered bow-rakes for sale in other regions (Counties Fejér, Veszprém, Komárom) (Vajkai 1959a: 299; Hegyi 1978: 86).

From the villages of the Bakony Mountains the woodworkers went working in groups into

the forests of major estates of Transdanubia. From the wood they received from their employers they made in a half-and-half system forks, rakes, scythe-handles and other agricultural implements (Hegyi 1978: 77–86). The domains bought forks and rakes for their labourers and the peasants for themselves from the itinerant woodworkers (home-workers) as well, who carried with themselves in their cart wood and instruments, so they could replace the broken tooth of a rake or the broken branch of a fork by a new one. In the southern part of County Fejér the bow-rake is known also as *German rake,* because it was bought from German itinerant woodworkers or exchanged for wheat, maize or wine as far as the middle of this century. In County Nógrád the bow-rake is called *Slovakian rake,* while in Central Transylvania the same type is known as *Hungarian rake.* The terminology refers to the nationality of the producers or anyway to the rake's region of provenance with inhabitants of the said nationality.

Among the Hungarians it occurs frequently, that other agricultural implements are also named after a foreign people or nationality. In the Counties Szolnok, Bihar and Csongrád, for instance, the fork with split prong is called *Roumanian fork* and the fork with set-in prongs *German* or *Slovakian fork* (Balassa 1949: 121; Szabó 1976: 41–57). The Hungarians living in Moldavia call a wooden plough-type *Hungarian plough,* because it is made westwards in Transylvania and brought by the woodworkers in carts. In Bulgaria and Roumania the name of a forktype is *Hungarian fork,* because it was imported into these countries from the Hungarian Bakony Mountains or was made by Hungarian wood-workers temporarily working there. In the past century such woodworkers came from the Bakony Mountains to Serbia, Croatia, Bulgaria and sometimes even to Styria for making forks and rakes. The Hungarian-made forks were forwarded from Bulgaria to Turkey (Vakarelski 1969: 22, Erdélyi 1959: 8–17). The narrow anvil used for hammering the scythes is called in Hungary the *German anvil.* Such anvils are known by the Italians (Ticino, Switzerland) as *incúdine tedesca* and are diffused by itinerant hay-mowers. In Northern Italy the narrow types are known as *incúdine alla francese, martéi franséis.* We may conclude from this terminology that this anvil-type came from France to Northern Italy. In Liguria (Italy) the flat anvil is called *martelli alla italiana* and the narrow type *martelli alla francese,* which is about to displace the former one (Scheuermeier 1943: 58–59; Gunda 1989: 239–240).

The bow-rake is absolutely unknown in the Great Hungarian Plain or occurs just sporadically in the eastern and northern border regions, where it was imported from the northern mountains (Mátra, Bükk). According to peasants this is because the bow of the rake is made of dogwood (*Cornus*) or hazeltree (*Corylus avellana*) and if it break, they cannot repair it. The tough grass of the plains strain and spoils the tool much more than the fine grass of the mountains.

The Széklers (Hungarian ethnical group in South-Eastern Transylvania) are most competent in making bow-rakes. Young lads made either themselves the decorative, carved bow-rakes with name and the date of year or bought them from skilful woodworkers for their sweetheart. For the head of the rake they used maple and beech, for the handle hazel and pine, for the teeth wood from hazel, plum and dogwood. The woodworkers make the rakes in winter. Like in Transdanubia it occurs, that they are working on the basis of a half-and-half system. With the ready-made implements they wander in summer all over a large area; they carry the rakes not only by cart, but also on their back, going from one village to the other. The Saxons bought with pleasure the Hungarian rakes. The head of these rakes was painted red and green. In 1930 Roumanian authorities decreed, that the favourite colour of the Roumanians, the yellow, must also be used for decorating the rakes. However, such rakes were bought neither by the Saxons, nor by the Hungarians. So, painting was left off forthwith and the rakes were decorated only by carving. At the beginning of the century many Székler harvesters and threshers went to Saxon villages where they were paid in kind (cereals). At the end of the season the Hungarian workers left their fork and rake to the Saxon farmer

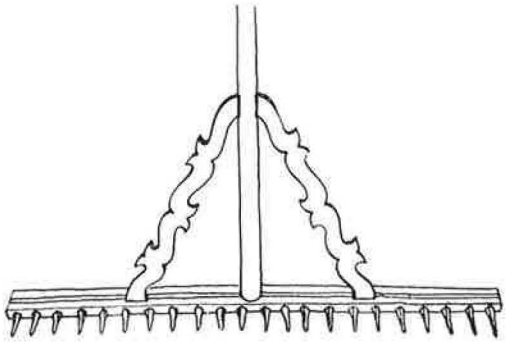

Fig. 9. Slovak hayrake with two brace-laths. Ábelová, Slovakia. After J. Hyčko.

as a present. The Saxon farmer often ordered for the next summer the necessary agricultural implements from his Hungarian workers (Haáz 1942: 28–30). The Slovak and Ukranian harvesters working in the Great Hungarian Plain also used to leave back their tools when returning home. These are all instructive cases of the diffusion of agricultural implements and of the appearance of new types. The fork- and split-handled as well as the bow-rake are used also by the Roumanians (Papahagi 1934: 177; Vlăduţiu 1973: 216; Focşa 1975: 72), but we do not know the geographical diffusion of the different forms. Our knowledge about agricultural implements of the Roumanians living to the south of the Carpathians is especially poor.

The rake made with 1–4 bows seems to be generally used by the Slovaks (Hyčko 1973: 32, 53). The bow is often replaced by two brace-laths, which are eventually decorated with carving and painting (Fig. 9). This rake type is also known by the Hungarians in Transylvania. According to Zs. Bátky the two brace-laths developed from the split handle as follows: fork handle → split handle → handle with two brace-lats → handle with bow or bows (Bátky 1906: 46). Of course, this conception of an evolution is but of theoretical character. In Transylvania there is still another variant of the handle with bow, where the bow is replaced by a square frame, painted or carved (Fig. 1: 8).

The Ukranian ethnic groups of the North-Eastern Carpathians are using fork-rakes for the hay-work. They know also a rake, where the end of the handle is used as a fork (Falkowski-Pasznycki 1935: 24; Pavliuk 1986: 157–188). The simple fork-rake is used by the White Russians for threshing and haygathering (Molčanova 1968: 42).

According to the different regions, the hayrakes are more carefully or roughly finished, the wood is also varying and so is the number of teeth, too. The Hungarians make them usually with 14 teeth. Rakes with dense and short dentation are used in Transdanubia, Transylvania and Slovakia, while the rakes with thin and longer dentation are preferred in the plains. This is because of the different quality of the grass on the hay-fields in the mountains and the lowlands. The former has a smaller, thinner and finer blade, whereas the lowland grass has a rough and longer blade (Hyčko 1973: 28; Paládi-Kovács 1979: 257–258). In Switzerland they use rakes with long and thin

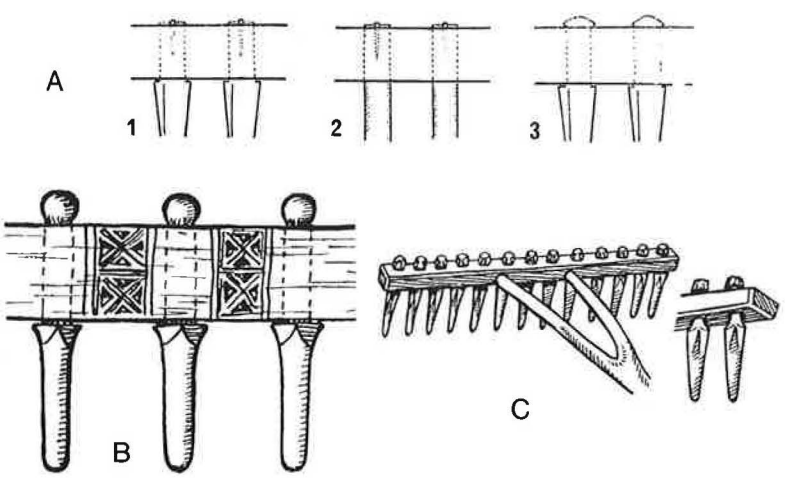

Fig. 10. Teeth of the "rattling rakes".
A: Slovakian. After J. Hyčko.
B: Hungarian. After F. Haáz.
C: Ossete, Caucasus. After B. A. Kaloev.

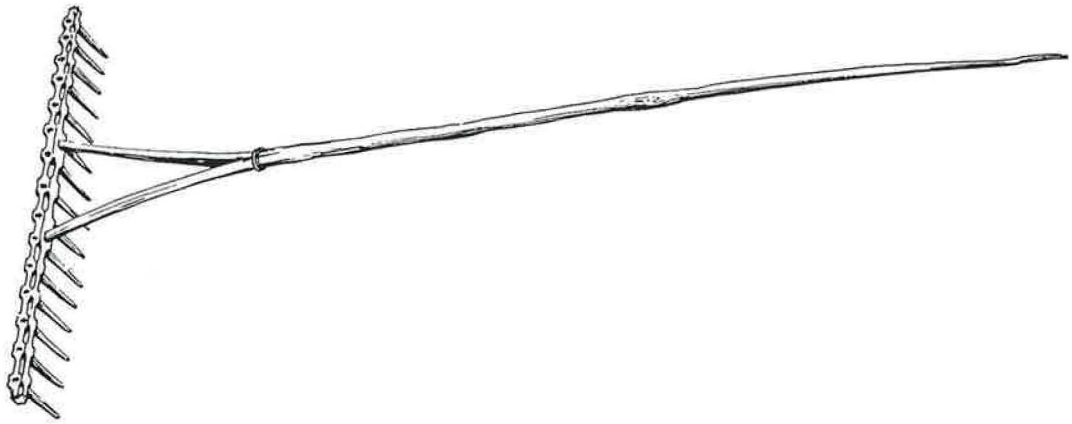

Fig. 11. Roumanian hayrake. The upper end of the split-handle is tapered. Oaş-Mountains, Transylvania. After G. Focşa.

dentation for the "fat" hay, and a short, dense dentation for the "thin, wild" hay (Lorez 1980: 17). According to the Ukranian ethnical groups (North-Eastern Carpathians) the rakes with short and dense dentation are fitting for hay and those with long and thin dentation for the cereals (Falkowski-Pasznycki 1935: 29).

J. Hyčko has noticed, that in the highlands and on river-banks the handle of the hayrake is always longer (190–220 cm), because such rake permits to gather the hay from a larger surface without changing one's place (Hyčko 1973: 28).

The fitting of the teeth into the head of the rake requires much skill and is done with various techniques, as clearly shown on Fig. 10. A: 3; B, C. When making the so-called "rattling rakes", the rake-head is soaked in water before the fitting of the teeth; these will then be carefully driven through the widenend holes and prevented by a boss from falling out. When the rake-head becomes dry, the teeth are standing loosely and can move 1–2 cm vertically; this produces a rattling sound on an uneven soil. "Rattling rakes" are made by the Hungarians in the Counties Gömör and Zemplén, as well as in Transylvania in the Kalotaszeg region and in the Széklerland. They are also known among the Slovaks and occur even in the Caucasus among the Ossetes (Fig. 10: C., Kaloev 1973: 15). Hungarian and Slovak lads give their sweethearts such rakes as presents (Haáz 1942: 28; Hyčko 1973: 29; Balassa 1964: 145; Paládi-Kovács 1979: 260).

In the Zemplén Mountains (villages Füzérkajata, Füzérkomlós) the woman guards througout her life the rake she has received as a girl and keeps it in the barn if broken or otherwise useless. In the Széklerland (villages Zetelaka, Kászonimpér) the decorative "rattling" hayrake is equally appreciated. The woman's favourite rake is often laid on her grave or a rake-motive is carved on her gravepost. This means also, that she was proficient in haywork.

The division of labour appears most distinctly in hay-farming. The mowing of grass, the whetting and hammering of the scythe are typical labour phases of men. They load the haycart, set up the haycock, carry the hay from the cock into the stable for the animals and are using for these activities various implements (dosser-basket, haybow, canvas sheet). The duty of the women is to bring the mowers their dinner on the field. They turn and dry the hay and gather it in small bundles. By tradition, the hayrake is exclusively a women's tool. Young women are gathering hay with pleasure, because it is a good opportunity for singing and gossipping. During haygathering, light-blooded women have no difficulty in finding a sexual partner. In general, hay gathering is a collective work, neighbours and relatives mutually help each other.

The upper end of the rake-handle is often

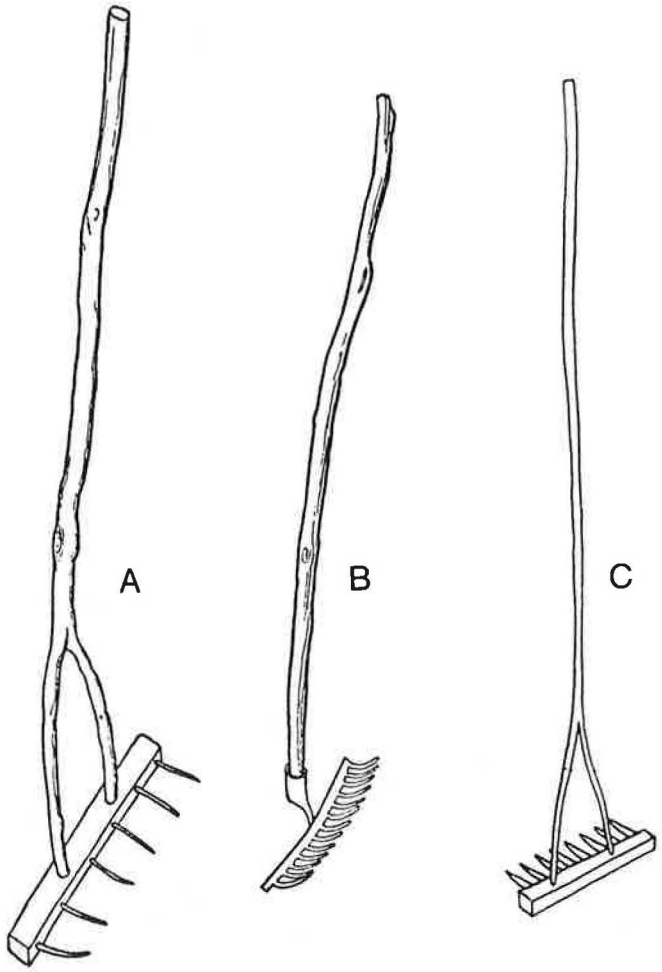

Fig. 12. *A*: Manure-rake. Átány, County Heves, Hungary. After E. Fél-T. Hofer.
B: Garden iron rake. Átány, County Heves. After E. Fél-T. Hofer.
C: Rake with long handle. It was used for smoothing the sides of the high straw stacks. Orosháza-Kardoskut, County Békés. After Gy. Nagy.

tapered, so that it can be driven into the soil after working. Thus the hayworker can see from afar, where he has left his rake (Fig. 11). Such rakes occur frequently in Carpathian Europe up to now.

The above described hayrakes are used by Hungarians, Slovaks and Roumanians for turning the swaths of corn. By means of this rake the windrows of cereals are gathered in bundles and then bound into sheaves. The manure carried on the field is dispersed with this rake, which is used also for other works (Fig. 12 A). In the highlands it is also used instead of the stubble-rake. The iron gardening-rake belongs to the hayraketype, its handle is generally a straight stake (Fig. 12 B). In the 18th century such rakes were used instead of the harrow for smoothing the clods left behind by the plough (Gunda 1937: 56, 59; Balassa 1954: 93; Hyčko 1973: 28; Szabó 1974: 118; Fél-Hofer 1974: 478).

Mowed with the scythe, the wheat is lying on the stubble in swathe, which has to be bound into sheaves. Therefore the female lifter gathers the swathe with a wooden or iron hook (Fig. 15), a sickle or sometimes with the above-mentioned hayrake into bundles corresponding to the size of the sheaves. These bundles are tied round with a straw-rope – and the sheaf is ready. This working process is generally practised in the Great Hungarian Plain. In North-Eastern Hungary the female lifter uses instead of the wooden or iron hook, the sickle and the hayrake a small wooden rake to help the

Fig. 13. Hungarian wooden rake to the sheaving. The female lifter gathers the swathe with this implement. Tiszaszentimre, County Szolnok. After A. Selmeczi-Kovács.

reach of her arms (Fig. 13, Selmeczi Kovács 1978: 273–274). According to A. Selmeczi Kovács such rake was used at the beginning of this century by Ukranian harvesters who came from the North-Eastern Carpathians for the harvest to Hungarian farmers. This small wooden rake (asymmetric form, Fig. 14) has raised the attention of E. Hahn, who has seen a similar implement in Southern Tirol, where the cereals were cut with the sickle instead of the scythe (Hahn 1914: 672–673). When harvesting with a short-handled scythe, such small rakes are also used in the Lüneburger Heide (Haberlandt 1926: 342, Fig. 190, 5; Bomann 1929: 137, 139). A. Fenton published recently a similar form of the implement and its use from South Scotland (Fenton 1976: 61). The Scots are using the small rake together with the long-handled scythe. According to L. Schmidt this rake is used in the agriculture of the Baltic countries together with the short-handled scythe (Schmidt 1950: 183–184), as stated earlier and later by other ethnologists as well (Dumpe 1964: 38–40; Istoriko etnogr. atlas 1985: 70–71, map 25). An excellent material and fine ideas can be found in the works of I. Weber-Kellermann and G. Wiegelmann on the short scythes and the accompanying implements, the long-handled rakes used for sheaf-binding (Weber-Kellermann 1965: 140, 147, 322–333; Wiegelmann 1969: 228–229, map 5).

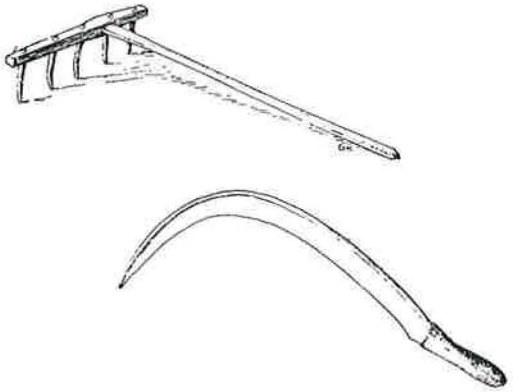

Fig. 14. Sickle and asymmetrical rake to the reaping in of the crops. Country Bozen, South-Tirol. After E. Hahn.

The use of the small rake by the Hungarians (Fig. 13) ist historically rather mysterious. It may be supposed that it was adopted by the Ukranians of the North-Eastern Carpathians

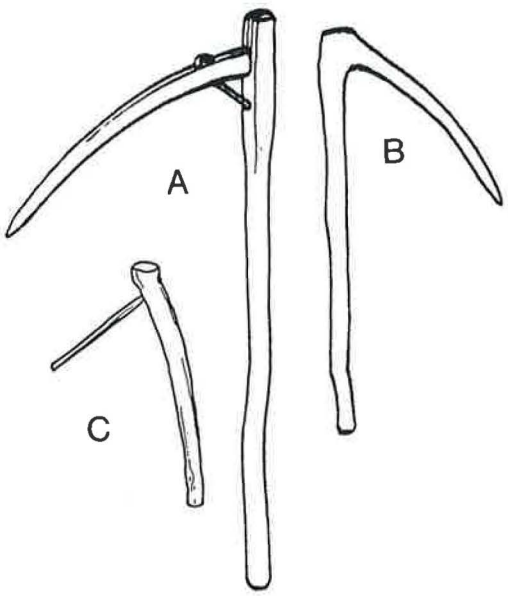

Fig. 15. Hungarian wooden hooks to the sheaving. *A–B*: Orosháza-Kardoskut, County Békés. After Gy. Nagy. – *C*: Átány, County Heves. After E. Fél-T. Hofer.

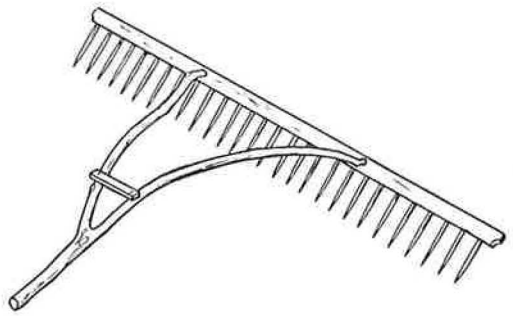

Fig. 16. Hungarian stubble-rake. Átány, County Heves. After E. Fél-T. Hofer.

from the German settlers living there, and was passed over to the Hungarians by the Ukranian itinerant harvesters. However, the implement was not mentioned so far as being used by German settlers. We have no safe information either of such small rakes having been used by the Ukranians of the North-Eastern Carpathians for sheaving. This rake is probably a local variant of the hook that was actually used for sheaving (Fig. 15. A–C).

In the Great Hungarian Plain a big rake is used for gleaning on the stubble-field (stubble-rake). In these regions it is also used often for haywork. Data of the implement: length of the handle 130–160 cm, length of the head 210–250 cm, number of teeth 22–26. The teeth are strong and often crooked or inserted aslant into the head (Figs 1:6; 16). This agricultural implement occurs also in Northern Transylvania and in the Széklerland, although without being generally used there. In the Great Hungarian Plain it is also used by Slovaks, Germans and Roumanians settled among the Hungarians, as well as by Roumanians and Serbs in the south-western border area of Transylvania. It is rather rarely used in Transdanubia and is sporadically known in the neighbouring Austrian regions (Burgenland, Styria, Carinthia; Moser 1971: 11; Moser 1985: 1:4; *Simon* 1981: 305; *Gál* 1969: 106).

The stubble-rake is usually made with a fork-handle, in the north-western part of Hungary (Zemplén Mountains) also with a stirrup-handle or a frame-handle (Fig. 17). All of these three variants occur in Slovakia, though the two latter rather rarely (Paládi-Kovács 1979: 264–265; Hyčko 1973: 32–3). Schematic figures of the Slovak forms are published by J. Hyčko (Fig. 18, A–D). On one of the types the handle is fitted with a hold, so as to make drawing easier. These types are also used often for hay-work. The Slovaks adopted the stubble-rake probably from Hungarian villages and domains, i.e. from the South. N. Ikvai named the Slovak peasants by name, who were the first to make in their village stubble-rakes, after having ascertained themselves of their suitableness in the neighbouring Hungarian

Fig. 17. Hungarian stubble-rake with stirrup-handle. Arka, County Borsod-Zemplén. After N. Ikvai.

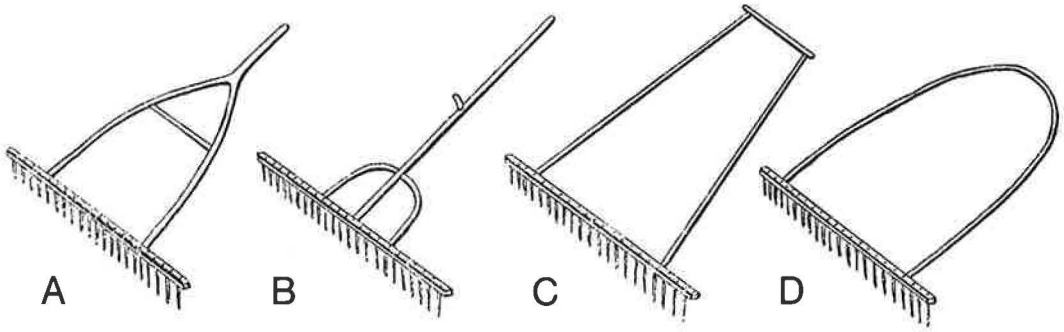

Fig. 18. Schematic figures of the Slovak stubble-rakes. After J. Hyčko.

villages (Ikvai 1967: 116–117). The Slovaks of the Zemplén Mountains learned to know the stubble-rake along the river Tisza, in the Nyirség region, where they worked as sharecroppers; after returning, they made it at home and took it with themselves, when they went subsequently to the Great Hungarian Plain for harvest. Even in some Hungarian villages of the Zemplén Mountains the stubble-rake was first used in the year 1950–1960 (Balassa 1964: 93). In the Northern Carpathians it was probably introduced by the Slovak seasonal sharecroppers who, in the 19th century, went working to the Great Hungarian Plain.

Just for fun the Hungarians often mention the stubble-rake by the name of a musical instrument (Hung. *bőgő, brugó* 'double-bass', *brácsa* 'viola', *hegedü* 'violin', *tambura* 'cither'). These denominations are actually semantic extensions and are based on the witty attitude comparing agricultural implements with the instruments of Gipsy bands. In some villages the Hungarian peasant would say, when he goes working with this rake: "I'm going to make music" or "I'm going to fiddle".

The stubble-rake is an implement of the plains; on the steep slopes and the small parcels of the highlands it is impossible to work with this big tool. It would be difficult to draw the cereals downwards and a plain stupidity to draw them upwards the slope. In Carpathian Europe it occurred at first at the beginning of the 19th century in the Great Hungarian Plain, when the harvesters began to replace the sickle by the scythe. It was probably first used in the great domains. When cutting the wheat with the sickle, the ears were not dispersed and so there was no need for a stubble-rake. In some regions of the Great Hungarian-Plain (e.g. County Békés) the lost ears were not raked together at the beginning of this century; they were either eaten by the pigs driven on the stubble-field or picked up by poor women, who threshed them at home with the beater. In Burgenland (Austria) it was also the appearance of the scythe which made the stubble-rake appear (Gaál 1969: 106).

Hardly known among ethnologists, J. Derlitzki published a paper in an agricultural periodical, stating that a big hark, more than 95 cm wide (German: *Schleppharke, Nachharke*) is used in Upper Bavaria, in Eastern Friesland, in Prussia as well as by the Lithuanians (Derlitzki 1924: 1–2). However, this paper is not detailed enough. According to the questionnaire of W. Mannhardt the stubble-rake was known in different regions of Germany (Brandenburg, Hannover, Hessen, Lippe, Mecklenburg, Pommern, Sachsen, Schlesien etc.) and in Switzerland. The German denominations of the stubble-hark are characteristic of the hard labour it requires (*Fauler Hund, Feldteufel, Hungerharke, Köter, Sauharke, Schweinteufel* etc.). Young lads, servants, shepherd-boys and women were drawing this heavy hark (Weber-Kellermann 1965: 333, 449–458).

Such large rakes are also used by the Scots to take up loose heads of corn. Already in the Quarterly Journal of Agriculture (1834) we can see a Scotswoman working with a stubble-rake. A. Fenton gives us detailed information about all this (Fenton 1976: 60–61). At the end of the 18th century the stubble-rake was recommended to the farmers by agricultural

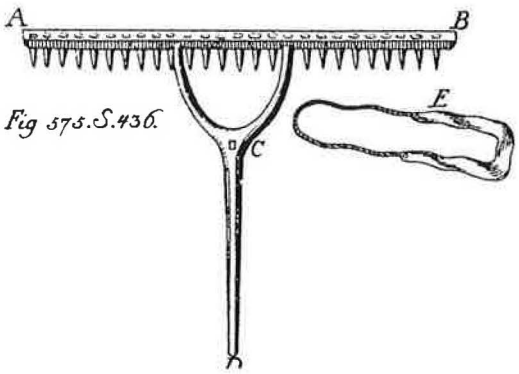

Fig. 19. German stubble-rake with strap (1788). After J. G. Krünitz.

works and was actually used in Holstein by the women. They fastened a rope (strap) to the handle and, throwing it over their shoulder, pulled the rake by it; holding the handle with both hands, they were able to direct the rake (Fig. 19, Krünitz 1788: 436). This way of use was not unknown by Hungarians or Austrians either. According to Russian sources of the 18th century the stubble-rakes were recent implements in Russia, but were used elsewhere (Western Europe?) already for a long time (Manninen 1933: 89). According to recent researches these rakes are used in the Baltic countries since the end of the 19th century (Dumpe 1964: 123; Ist. Etnogr. Atlas 1985: 85).

It can be concluded from the aforesaid, that the use of the stubble-rake can be explained after the cessation of the sickle's use with the mowing by the scythe, the proper superficial conditions, the size of arable land and with the rationalization of country work. It is not impossible that in Hungary the interest in this implement was raised by western agricultural works of the 18th century (e.g. J. G. Krünitz) and by personal experiences gained in the West. Numerous descriptions of Western European agricultural methods and implements can be found in Hungarian technical literature of the 18–19th century (Bartha 1973).

In the Great Hungarian Plain and in Transdanubia the wheat and the barley were threshed till the beginning of this century (in some regions even further) in the open-air threshing floor with horses, eventually with cows or oxen, or with horses put to a cart (Barabás 1987, map Nr. 62 made by A. Paládi-Kovács; Hoffmann 1963: 240). The ears were crushed by the animals or the cart-wheels and so the grains fell out and were cleaned from the chaff, after the straw has been taken off with a fork. For the cleaning procedure the people used the threshing-floor-rake or chaff-rake. This was a fork-rake with a more or less long handle and with wooden or iron bent teeth (length of the handle: 160–230 cm, length of the head: 55–70 cm. Figs 1:10, 11; 20). The bent teeth made it possible to lift the crushed straw and thus to shake off the grains that remained in the straw and the chaff. The bent teeth did not scratch the soil of the threshing-floor. The work with the chaff-rake went on as follows: Standing at the edge of the round threshing-floor, the worker pulled the chaff with the rake from the grains towards himself and, when the rake was already next to him, gave it a careful kick so that the grains should fall out of the chaff. Then he pulled the chaff in the rake to the edge of the threshing-floor. The rake was also used with its teeth turned upwards, for pushing the grains to the middle of the threshing-floor. The difference in the length of the rake handle (160–230 cm) de-

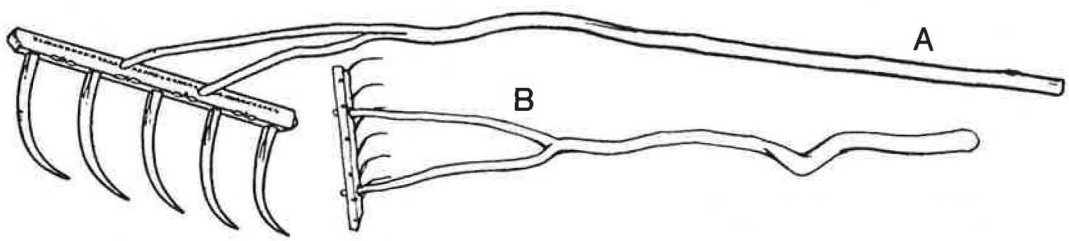

Fig. 20. Hungarian threshing-floor rake with wooden and iron bent teeth. A: Átány, County Heves. After E. Fél-T. Hofer. B: Orosháza-Kardoskut. County Békés. After Gy. Nagy.

pends on the diameter of the threshing-floor made according to the size of the farm and the quantity of the crop.

The chaff-rake is generally used by the Slovaks, even when working with the flail (Hyčko 1973: 33). There exist among the Slovaks several chaff-rakes from the past century with the date of the year carved in (1839, 1848). We do not know, how long the Hungarians are working with the chaff-rake; the making of threshing floors and the threshing by treading with animals is of very old date and at a high level. The Hungarian term *szérű* 'threshing floor in the yard' is an Old-Turkish word from the time before the occupation of Carpathian Hungary (896 A.D.). It is therefore most probable, that the chaff-rake is also an ancient agricultural implement of the Hungarians. When threshing with the flail, the use of the chaff-rake is of secondary importance. This might leed us to the conclusion that the chaff-rake was introduced among the Slovak of the Northern Carpathians by those Slovak agricultural labourers who earned their living in the Great Hungarian Plain and in Transdanubia with harvest and threshing.

I have not much to say about the use of the chaff-rake with bent teeth in Europe. In Italy it seems to be wide-spread (Scheuermeier 1943: 132). T. Pamfile describes the Roumanian, and R. Wolfram the Austrian threshing technique by means of treading, mentioning also the use of the rake, but not its type with the bent teeth (Pamfile 1913: 211; Wolfram 1979: 11). In Burgenland, however, the Austrians are using such rakes, which even bear a mark of ownership (Simon 1981: 304).

There is still another Hungarian rake-type to be mentioned. It looks like the hayrake, but its handle is 3–4 m long. In the Great Hungarian Plain it was used for smoothing the sides of the high straw stacks (Fig. 12. C, Nagy 1963: 99). Of course, this rake-type was used only on larger farms and domains.

In peasant farms there are, of course, several variants of the different rake-types (also in Germany, Gebhard 1969: 71), but even with a most circumspect field-work it would be impossible to gather them all.

I was told quite recently that in some villages of Transdanubia the length of the rake-teeth is measured by "fists". A "fist" is a linear measure, when the thumb is upright and the other fingers are closed. Since the "fist" represents not the same length for everybody, the length of the rake-teeth may vary by 1–2 cm, according to the hand of the producer.

What have linguistics to tell us about the rakes? The Hungarian term *gereblye* 'rake' appears in written sources at the end of the 14th century (1395), but obviously the implement itself was already known for a while before its name was recorded for the first time. The Hungarian *gereblye* is a Southern Slav or Slovak loanword, but I think, that the Hungarians probably knew already earlier some kind of a rake (threshing-floor rake?). However, its name fell into oblivion. R. Müller believes, that the rake came to the Hungarians together with the long scythe in the 14th century from the Slavs, and played an important role in hay-farming (Müller 1982: 497, 529). This could have been only the small hayrake. But in this case we have to emphasize, that words are more conservative and long-lived than the objects.

The word standing for rake is common in every Slavic language (Slovak *hrable,* Polish *grabie,* Ukranian *hrabl'í,* Russian *grábli,* Serbo-Croat *gràblje,* Slovenian *gráblje,* Bulgarian *grába*). These are ancients words in the Slavic languages and mean primarily hayrake (Berneker 1924: 344; Vasmer 1953: 302). Hay-farming was undoubtedly at a very high level among the ancient Slavs, and even today the different Slavic peoples apply much care to haymaking. In Roumanian, too, *gréblă* 'rake' is a Bulgarian loan-word (Mihăilă 1960: 23).

In Carpathian Europe and on the Balkan the rakes occur most rarely in archaeological finds. The Illyrian iron rake discovered in former Yugoslavia (Unec pri Rakeku, Ist c. B.C.) corresponds to the Roman rake, which can be regarded as a precursor of the harrow (Beranová 1980: 92). Similar heavy iron rakes were used by the Dacians (Grădiştea Muncelului, Southern Transylvania, 1st c. A.D.). These finds cannot be regarded either as predecessors of the rakes of the 18–20th centuries. They probably functioned as harrows and were used for

smoothing the surface of the soil. The Roman *rastrum* could not have been either a predecessor of the present rakes, its function was different from that of the rake. According to K. D. White the *rastrum* was used for digging and clearing the surface of the soil, for breaking the ground as substitute for the plough, especially in hilly terrain, for reducing the large clods left after ploughing etc. (White 1967: 52–53, 55; Columella 2, 11, 13; Varro Rerum rusticarum 1, 49).

A rake-find to be taken into consideration from our point of view is of mediaeval origin and was discovered in Poland (Niestronno, Region Mogilno). It is a short-headed, straight-handled hay-rake (Hensel 1965: 91). Such might have been the ancient rake-form of every people in Carpathian Europe and it was mainly used in hayfarming. The change in the form and function of the rakes was caused by the appearance of the long-handled scythe. The history of the chaff- or threshing-floor-rake ought to be investigated more closely.

It is well known by ethnologists as well, that the relation between the peoples of various languages in Carpathian Europe, on the Balkans and in Eastern Europe is tense. While examining Hungarian folk-belief and customs, a Hungarian ethnologist, Géza Róheim, wrote at the beginning of this century, that the peoples of Europe do not realize, how close they stand spiritually to one another. I think, this is what we can also say when seeing, that the different peoples are working with the same implements.

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