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Working at Play: The Phenomenon of 19th Century Worker-Competitions

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Cornhuskers, Lumberjacks, Miners, Cowboys, Packers and Boilermakers, are not only the nicknames of prominent collegiate or professional sporting teams, they are also the occupations of 19th century worker-athletes. This study suggests a synthesis of labor and sporting history can provide a new understanding of work, especially the physical work of the farm, frontier and factory. Competitions among workers which emphasized useful skills, like plowing, reaping, rock drilling and tree cutting, were common in the antebellum and post Civil War periods, often drawing large crowds and the attention of sporting journals. This is an investigation into the nature of work and play, which blended into each other. Samples of 19th century worker-competitions are offered in seven categories. The issues of worker alienation, productivity, lack of interest from sports historians and the nature of leisure time are considered. Many worker contests have survived and thrive today as spectator sports.

KEYWORDS: *History of leisure, work competitions.*

> "We need to study work as an expression of culture, because the meaning of work is incomprehensible without recognition of the simultaneity of action and the social and cultural relations that implicate action." (Tomlins, 1999, p. 33)

Introduction

Competitive work games became an apparent part of America's economic and cultural life in the 19th century. Work-sport champions performed feats of strength, dexterity and endurance at or after work. By the end of the century more than 45% of the American work-force found themselves in occupations in which worker-competitions were widespread (U.S. Bureau of the Census, 1975). Remarkably, given the economic and cultural implications, not a single study focuses on the phenomena. Vincent (1994) explains the evolution of occupational sports:

> Americans had been engaged in sports since colonial times, as evidenced by the numerous edicts and diatribes written by Puritans condemning everything

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> from horse racing to deer hunting. However what passed as athletics in Colonial America was along the lines of informal competitions between neighbors to see who was the fastest woodchopper. (p. 16)

Because work time and leisure time were not so rigidly separated as they are today, early 19th century work and play mingled with one another.

I have defined worker-competitions (work-sports) as physical contests derived from a laborer's occupation (Bureau of Labor Statistics, 1998). Many 19th century occupations were unquestionably skilled requiring strength, speed, endurance, dexterity and eye-hand coordination (Conk, 1980). Examples include plowing and mowing matches, breaking or drilling rocks, logrolling and tree cutting, and laying rails or bricks. Some delimitation is necessary.[1] Initially these competitions were local in scope and played without standardized rules. Many were arranged ad hoc and the distinction between the spectators and the players was, at times, not clear cut. And there was no need to distinguish between amateurs and professionals. These games were part of a larger pattern which Gold and Goldstein (1993) called folk recreation. As defined here worker-competitions or work-sports should not be confused with what sports historians often refer to as "worker's sports," the amusements and recreations of the laboring class (Couvares, 1984; Cumbler, 1979; Gorn, 1986; Harvey, 1969; Nelson, 1975; Rosenzweig, 1983). Nor should work-sports be confused with the work situation in which laborers "compete" with one another for better materials (especially in piece rate jobs), or work space (Zahavi, 1988).

The immediate justification for the American worker to engage in such activity may have been to have some fun, relieve boredom or win a monetary sum. There may have been deeper reasons. Regardless of the reasons for participation, successful work-athletes won bets, set records and enhanced their own local reputations. And since worker competitions amounted to de facto on-the-job training programs in numerous occupations, productivity

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[1] 19th century American worker competitions were numerous and varied. Work-sports are defined as contests in which laborers fashioned a game from their job. The author has eliminated from his definition: a) all competitions in which machines play the major role in deciding the outcome (eg, tractor pulls); b) all marksmanship (eg. pistols, rifles, bows and arrows) contests since it is difficult to differentiate between hunting for necessity and hunting for sport; c) all food preparation games (eg. cooking, baking); d) consumption games (eg. pie eating); and e) personal appearance (eg. cosmetology). The delimitation eliminated a number of female participants. What is left are, in the main, physical contests. Rock breaking, rail laying, rock drilling, timber games, corn husking, rodeo, fire engine playing (musters), brick-making, stitching, typesetting and butchering are samples included in this article. A more complete yet in-exhaustive list of worker games, contests and sports would include: plowing, spading, cradling, mowing, picking, raking, reaping, threshing, digging, packing, sheep-shearing, milking, wheel barrowing, lifting and brick-laying, as well as contests/challenges for mechanics, draymen, tinkers and blacksmiths. Even physical contests by slaves, (eg. cotton picking) are included. It should be noted that worker competitions as described here have little to do with work structured as a consent-producing game as described by Michael Burawoy. For descriptions of these elaborate performance reviews or 'worker games,' see Burawoy, (1979).

was advanced. Not only did the games demonstrate the capability of workers and develop new tools and techniques, but they served as early efficiency training (see Table 1).

This study identifies the phenomenon of 19th century work-sports and offers a rationale for their incidence. Three issues should be made clear from the start. First, worker competitions are not new. Plowing and grass cutting (with a scythe) contests were part of Homeric Society (Applebaum, 1995). What is different is the frequency and popularity of worker competitions in American work history. A count in just America's sporting journals in the years immediately preceding and immediately after the Civil War reveal hundreds of documented cases. Yet in England, for example, there appears to be little evidence of the same. In Thompson's (1963) seminal study of the English working class not a single reference to worker competitions, games or contests exist.

Second, modern historians, both labor and sporting, have paid scant attention to this phenomenon, perhaps thinking that the concept of com-

TABLE 1
Number of U.S. Workers in Occupations Common to Worker-Competitions, 1900
(in Thousands of People, 14 Years Old and Over)

Occupation	N
Bartenders	89
Blacksmiths	220
Brick masons	154*
Carpenters	596
Farmers	10,888
Firemen	15
Lumberjacks	210
Meat cutters	33
Miners	660
Other Construction trade**	204
Railroad laborers	107
Sawyers	18
Typographers	134
Total	13,328
Total Active Work Force	29,030
% of Work Force in occupations in which worker-competitions are common	45.9 %

Note. Adapted from Census data, reported in Series 233-682, "Detailed Occupations of Economically Active Population: 1900 to 1970" Bureau of the Census, 1975, *Historical Statistics of the United States: Colonial Times to 1970,* (Washington, DC, 1975), pp 140-145, and M. A. Conk, 1980, *The United States Census and Labor Force Change: A History of Occupation Statistics,* Ann Arbor, MI. *-includes an estimated 6000 apprentices. **b-includes blacksmiths, millers, paperhangers, plasterers, roofers, stonecutters, tinsmiths, and non manufacturing construction.

petitive work-sport was the other's domain. For the most part, with the exception of minimal references in Kirsch (1992) and Gems (1995), the story of competitive work contests has fallen through history's cracks.

Third, worker competitions do not fit neatly into the neoclassical theory of value as propounded by Locke, Smith, Mill and Marx. Weber maintained that one had to take into account the tangled web of causative influences linking the economy and the social structure to explain one's motivation to work. While neoclassical economics sees work as a rational economic action, this paper considers work and the accompanying worker competitions as a more intricate social action (Bradley, 2000; Etzioni, 1988).

This paper provides needed details about the hitherto unidentified history of worker-competitions, what I am calling *work-sports*. The evidence is scattered among trade and historical journals, diaries, occupational and folklore histories, trade union journals and sporting newspapers. When pieced together what emerges is a picture of a nation at work *and* play. These competitions were seen as true sporting events at the time but were initially restricted to local reports. The very first work-sport to be reported in a non-local newspaper was a Maryland plowing match although, the report asserted, such contests had been common in New England for years (Skinner, 1828).

The nation's first sporting newspapers, the *American Turf & Register* (1829), and the *Spirit of the Times* (1831) also printed abundant reports on worker competitions sent by local enthusiasts (Betts, 1953). By mid-century work-sports were frequently detailed in the national sporting media and the *New York Clipper* annually published work-sports records. For example, from 1856 to 1858, The *Clipper* alone published 135 accounts of worker-competitions. These normally included the date and location of the contest, a short description of the event, the name(s) of the contestant(s) and frequently the size of the wager.[2]

19th Century Worker Competitions

I have classified work-sports into seven categories and offer an example of each. The selected categories closely resemble standard occupational/industrial classifications: construction, farming, ranching, mining, timber, service and craftsmen games.

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[2]John F. Skinner, Baltimore, founded the *American Farmer* (1819) and the *American Turf Register and Sporting Magazine,* (1829). Both were published weekly. The former included a sports column *Sporting Olio.* The latter was not devoted to the turf alone. It also featured material on outdoor sports, pedestrianism and, occasionally worker-competitions. The *Spirit of the Times,* founded in 1831 in New York, is said to have been the first all-around sporting journal in the United States. From 1831 to 1861 it focused on horse racing but also published frequent accounts (sometimes snippets and sometimes detailed) of worker-competitions. The *New York Clipper,* founded in 1853 by Frank Queen, was a weekly. But it also reported on reaping, plowing, mowing, tinkering, cradling, pole climbing contests and more.

Construction Contests

In the 19th century thousands of day laborers were required to create infrastructure, whether local, regional or nationwide. An entire continent of roads, bridges, canals, and railroads were constructed in a remarkably short period of time. Two of the most famous of these projects included the building of the National Road (1806-1845) and the laying of the Transcontinental Railroad (1862-1869). In each of these "notable" projects accounts of worker-competitions survive.

In the first half of the 19th century, Congress appropriated nearly $7 million dollars to construct a road from Cumberland, Maryland, across the Appalachians to the Ohio River and beyond. This vital link between the eastern seaboard and the Old northwest (then Ohio, Indiana, Illinois and Michigan) was to be sixty six feet (4 rods) wide and to have an incline of no greater than five degrees. The road's bed and surface were to be crushed rock. Contractors provided laborers with a pair of iron rings, one seven inches in diameter and the other three inches (Ierley, 1990; Raitz, 1996). Broken rock for the base had to pass through the larger ring, while stone for the top layer needed to pass through the smaller.

Over the next decades hundreds of laborers, sledges in hand, were put to work crushing rock on the National Road and a few developed widespread reputations. One well advertised 1848 contest found a pugilistic supervisor, a Captain Elias Gilmore, and Robert S. McDowell of Dunbar, Pennsylvania, reputed to be one of the fastest stone breakers in the West, in a one-on-one "7 inch ring" strength and endurance contest. (Searight, 1894). A large crowd gathered and heavy betting ensued. Using the conventional road width, an average stone crusher laid approximately 4 rods (66 feet) of crushed stone per day. In other words, a typical day would yield about 4,300 square feet of sub-stratum road bed. McDowell and Gilmore began early one morning and moved in opposite directions. By mid-afternoon Gilmore, had conceded using the gesture of "yielding the palm" after McDowell had laid a bed of seven inch stones 8 rods plus 2 feet (134 feet) × 4 rods (66 feet) or 8,844 square feet. (Gilbert, 1976). McDowell's crushing rate amounted to approximately 1000 square feet per hour or 19 square feet per minute.[3]

A more famous construction competition, between the Union Pacific, heading west, and the Central Pacific building eastward, took place during the construction of the transcontinental railroad. Early in 1869 the meeting point of the two railroads had been arranged at Promontory Point, Utah, and a sense of urgency prevailed so that the daily goal was to lay as much track as possible, often at the expense of workmanship, cost and safety. Charles Crocker, an executive of the Central Pacific and Thomas Durant, the Vice-President of the Union Pacific, got into a friendly boasting match

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[3] A string of stones one rod in length equaled two perches, the gauge in use. McDowell's official distance was 16 perches and 2 inches.

about the prowess of each's work crews. A bet of $10,000—an enormous sum for the day—was made for the company which could lay the most track in a single day.

On April 27, 1869 the Union Pacific had "set" a single day track laying record of 7½ miles. The next day, starting at 6 am, a chosen eight man team of Irish carriers and supporting crew of Chinese set out to win Crocker his bet. Crocker had taken took no chances for his crew's record attempt. He had the land graded in advance and ties strung out along the right-of-way for the first few miles.

Hour after hour the eight selected rail carriers—four in a squad—seized a pair of rails from a rail truck, ran forward and plumped them down. They were immediately adjusted, spiked and bolted while three solid columns of Chinese workmen, with picks and shovels, ballasted the roadbed. All the while another squad of countrymen shoved the rail truck forward over the newly-laid rails. At the moment a rail supply truck was empty it was tipped to one side and another loaded truck was quickly moved up and the work proceeded without a hitch. Sabin (1919) tells us that "Union Pacific watches timed the march at 144 feet a minute—five pairs of rails, or a pair every twelve seconds" (pp. 201-202).

Even today the numbers are mind boggling. By seven pm the Central had passed the ten mile mark, then went another 50 to 60 feet for good measure. The eight Irish iron men became instant sporting heroes. The names of Sullivan, Dailey, Joyce, Kennedy, Killeen, McNamara, Wyatt (some say Elliot) and Shay went into Railroad lore. The press, as in any major sporting event, told the tale with statistics. It was reported that 3,520 rails were drilled to 25,800 ties in the 12 hour stretch. Nearly 1,000 *tons* (two million pounds) of rails were manually handled and spiked with 52,000 pounds of spikes. (Alta California, April 29, 1869).

Rosenberg (1982) tells us that laying one mile of track per day was normal and two was possible with preparation, overtime and an extra economic incentive. Brown (1977) notes that, in the guise of a competition, both companies "had achieved a high degree of efficiency in planning and organization (of laying rails) . . . and had discovered the importance of time-and-motion studies before the technique was given a name" (p. 110).

Farming Contests

The family farm and the Southern plantation provided Americans with ample opportunities to engage in worker competitions, many of which were not new. The agricultural frontier produced individualized work games like plowing, mowing, cradling, reaping, picking, husking and other harvesting chores. The constraints of the day forced male and female alike into cooperative work-play games. There were threshing bees, flax-scutching bees and shucking bees. Some work games were female in nature, like quilting bees. Farming provided more than 71% of the nation's employment in 1820. By 1900 the figure was still high, 37% (U.S. Bureau of the Census, 1975).

One of the most reviled farming tasks involved husking and shucking corn. To spread the work—*many hands make light work*—husking bees became common on New England farms in the 18th century while Ownby (1990) tells us that, in the South, corn shucking contests were common and local in the 1860s. In the 19th century many Midwest farmers created husking matches with small cash prizes to help bring in the crop.

It was not until the early 20th century that corn husking as a game took on a "national" character when a conglomeration of farm journals known as the National Corn Husking Contest Association sponsored annual fall events which drew crowds exceeding 100,000 (Jacobs, 1983). By 1929 NBC Radio began broadcasting the "nationals" live. Statewide, beginning with Iowa in1922, and later nationwide, corn husking contests were the brainchild of Henry A Wallace, editor of *Wallace's Farmer,* and later U.S. Secretary of Agriculture and Franklin Roosevelt's Vice-President.

By 1938 eleven states sent their state champions to the "nationals." With the use of their favorite hook or peg, a leather or steel aid strapped or fitted onto the hand, the contestant walked down a row of corn stalks, grabbing and slashing and removing husks and flipping the ears into a wagon drawn by his side. Evans (1969) explains that, at the highest levels of competition "contest huskers could grab, break, and flip from fifty to sixty ears per minute, or almost an ear per second" (p. 207). Huskers possessed strong wrists, hands and arms and very speedy eye-hand coordination.

Top huskers could fill 30 to 35 bushels in the allotted 80 minutes. Irvin Bauman, a farmer from Woodford County, Illinois, set a national load record of 46.58 bushels in 1940, more than 1½ tons. One fabled champion, Orville Welch, of Piatt County Illinois, claimed that, at age eighteen, he had shucked 136.5 bushels per day for 22 days and on a single day, had once husked 220 bushels, or about 3½ tons (Jacobs, 1969).

Ranch Contests

Krueger (1939) demonstrated that, as Americans moved westward, they took their games with them. The ranch and range provided an opportunity for another work-related sport with an older past, the rodeo. Formal American rodeos began testing cowboy's work related skills as early as 1869 when the trail drivers of three large ranches, The Mill Iron, the Camp Stool and the Hash Knife, staged an event for their hands at Deer Trail, Colorado (McDonald, 1971). Other early "tournaments" were held in Piney Ridge, Arkansas, Santa Fe, New Mexico and Pecos, Texas (Porter, 1971). These original affairs offered roping contests, bronco riding and horse racing for small sums of money. Female competitors were common and in many cases women competed directly with men. Rodeos soon spread to Canada. One, staged in Regina, Saskatchewan in 1896, evolved into the famous Calgary Stampede.

In 1897 the *Cheyenne Daily Sun-Leader,* in cooperation with the Union Pacific Railroad, "invented" a tradition, the *Frontier Day* celebration. Soon these celebrations attracted competitors from throughout the West and

thousands of spectators. The 1897 affair offered a purse of $400 to be split among events in which cowboys demonstrated work related skills (Gems, 1995).

Mining Sports

Some of the nation's most physically difficult labor of the 19th century was performed by miners. Western copper and silver miners, mainly before 1875, would drill rock by hand until a small pocket in the rock was ready to be loaded, usually with black powder, and blown apart (Lankton, 1991; Twain, 1872/1984). Rock drilling developed into contests, which undoubtedly had originated as an informal boast or challenge. Hand-drilling contests had all the qualifications of a successful spectator sport: standardized rules, teamwork, technique, endurance, speed and danger, especially if the striker inadvertently missed the tiny head of the steel drill and pulverized his partner's hand (Crampton, 1982; Young, 1976).

Single-jacking contests featured a lone contestant. Double-jack drilling was done by two-man teams, one man striking with an eight pound sledge while his partner held a steel drill which the latter periodically replaced as drills dulled. The holder also continuously cleaned the hole of silt and gravel. Often team members switched positions. There were even three-man teams, two strikers and a holder. Contestants brought their own sledges and sharpened drills of various lengths. Organizers provided a block of granite, at least six feet thick, and gave contestants 15 minutes to drill as deeply as possible. Only one driller or team competed at a time. Betting was continuous as officials posted approximate depths on nearby chalkboards (Smith, 1967).

So popular were the contests that they often were the feature of Fourth of July celebrations in many Western mining towns in the 1870s. A professional circuit was established with a "national" contest conducted annually in Butte, Montana (Campton, 1982). At the height of the drilling craze, contestants were divided into heavyweight and lightweight divisions. Some of the drilling records still exist. For example, in single jacking, Fred Yockey put down 23¼ inches in El Paso, Texas in 1903, a record that most experts claim has never been topped. In the same year a team of Chamberlain and Carl Make drilled 42½ inches in fourteen minutes at El Paso, Texas, then loafed through the final minute so as not to discourage future betters (Richie, 1951).

Timber Games

Forest contests were also popular. Wood was the new nation's most essential building material. Vast timber reserves were located in New England, the Great Lakes region, the southeast and the Far northwest. In the mid-19th century the majority of America's lumber output came from the three states that touch Lake Superior: Michigan, Wisconsin and Minnesota. There hundreds of camps became home for lumberjacks of two types: the year-round

professional and the seasonal farmer who normally jacked the winter months after harvest. These were tough, hardy men whose entire work life was spent in performing difficult physical feats.

Lumberjacks built roads, felled and swamped (trimmed the branches) tall trees, sawed them into 14 to 18 foot sections, transported the logs to railroads or streams, and river drivers guided lumber downstream, clearing jams along the way (Dill, 1957; Fries, 1942; Heilala, 1962; Leech, 1934; Nelligan, 1929; Orcutt, 1925; Raney; 1935; Ward, 1936). It was highly skilled work. Life in lumber camps was uncomplicated. Bellaire (1942) explains that work challenges were widespread. Log drives, for example, produced birling contests, where two men, one standing at each end of a log in water, attempted to spin the log with such swiftness or to reverse its rotation with such velocity, that the opponent would tumble into the water.

Sawing and chopping contests were also examples of logging skills demonstrated at forest festivals which dated to 1872. Lumberjacking events began in 1900 (Meyer, 1967).

Service/Training Games

American cities of the 19th century, built mostly of wood, were, every so often, overwhelmed by fire. McNally (1986) explains that "It was from 1790 until the Civil War that the volunteer fire service rose to a position of prominence in the United States. Until roughly 1860, the volunteer fire companies were the only form of municipal or public fire protection" (p. 43). For example, in 1860 New York City had 84 companies and 5000 volunteer firemen. Philadelphia's numbers were 89 and 4000. In the largest cities volunteer fire companies answered between 1500 and 2000 alarms annually (McNally, 1986). Their response to fires was both competitive and entertaining.

Often decked in distinctive uniforms and hauling their hand-pumping "masheens," "engines," or "handtubs," companies raced one another to fires. Fire fighting became a profession in most large cities after the Civil War. Volunteer or professional, it is fair to say that the 19th century firefighter saw his efforts as work. It was a disgrace to be passed by another company and early arriving teams hogged the hydrants. Brawls over the use of hydrants, or anything else, were routine (Ashbury, 1930; Greenburg, 1991; Holzman, 1956). Those companies which pumped the fastest and farthest won crowd applause, bragging rights, and often, financial reimbursement from the victims (Ginsberg, 1969).

Firefighter's contests were among America's oldest organized team sports. At the time quoits, rowing, cricket, rounders (an early version of baseball) and horseshoes were familiar team games. The first "fireman's muster"[4] at which official records were kept, was apparently held at Bath, Maine, on July 4th 1849 (Dixon, 1978). Musters were popular and included

[4]A muster is a recreational gathering of firefighters (initially volunteer) at which competitions are held in firemanship skills.

parades, demonstrations, races and pumping contests for height and distance. Within a dozen years hundreds of musters were held annually and reported in the local and national press.

For example, the *Boston Post* ("Trial of Steam Fire Engines," September 1, 2, 1858) reported detailed results of a regional muster, listing extensive rules, the names of judges, cylinder and stroke size, horizontal and vertical pumping results, names of the captains and prize money. In 1857 alone the *New York Clipper* published the results of 36 major musters. The press treated firemen with the same adulation of other sporting heroes.[5] The *Clipper* (January 16, 1858) published the biography and a portrait of their "Champion Fireman of America," 25 year old William W. Bush, noting that the 5'10", 170 pound Lockport, NY native, "is in his glory at a fire, when he is in actual danger, or befitting mankind" (p. 312).

The popularity of fireman musters did not wane in the last half of the 19th century. But the growth of other sports, namely professional baseball, college football and amateur track and field, plus the re-emergence of boxing, tended to push the muster off the sports page. Nonetheless, fireman's competitions became the first work-sport to be conducted with the modern Olympic Games. Paris organizers invited volunteer and professional fireman's team to compete at the loosely structured 1900 International Exposition and Olympic Games. The Kansas City, Missouri, firehouse won the world's professional fireman's championship cup ("Won as Professionals", Kansas City Star, August 20, 1900).

Craftsmen Games

All 19th century sports were not conducted on the frontier or farm. As Americans urbanized and industrialized competitive worker-competitions also moved indoors to factories and offices. Many of the more formal affairs appeared in the local press. Still others drew national attention. A few examples include:

- John Hawkins made 922 bricks in 55 minutes, assisted by two off bearers and a wheeler, in Baltimore, October 12, 1885 (Clipper Annual, 1888).
- In 1868 Charles Miller and Charles Winter, a pair of San Francisco harness makers, competed in a match to sew two rows of stitches, ten to an inch, on harnesses six feet in length. Miller won the $40 stake by 27 stitches (Clipper, June 17, 1868).
- In the 1870s typesetting challenges were a national craze. The *New York Clipper* reported results of three such affairs: in Pittsburgh, Springfield, Ohio and Rochester, New York. In the latter one J. C. Coon undertook,

[5]The public viewed firemen as some of the very best athletes because, in numerous cases, they *were* the same people. For example, On June 24, 1857 the Hook and Ladder Company No. 1 of New York organized the Mutual Baseball Club. Using its own members the Mutuals annually contested for national honors (then called pennants). One Mutual star was renowned fireman John Goldie, the slugging first baseman who also happened to be the star all-around athlete of the New York Caledonian Club.

on a wager, to set 18,000 ems in 18 consecutive hours, or 1,000 ems an hour. This was a feat of endurance since, at the time, 1,000 ems could be set by a competent printer in an hour.[6] Craftsman from all the cities printing offices attended and large sums of money were staked on the results. Coon was successful. (Clipper, March 26, 1870). By 1886 typesetting contests were truly national. That year's national champion was William C. Barnes, a typesetter from the *New York World,* who won a week long contest in Chicago. (A Collation, 1887).

- Butchering records were kept for several styles (*go as you please,* and *market*) for bullock, sheep and chickens. For example, at a six contestant (called butcher athletes) bullock butchering challenge cup event in Chicago on May 15, 1869, 19 year old Charles Leyden of Chicago, after just 4 minutes and 45 seconds of work, was declared *Champion Butcher of America,* awarded a champions belt (ala boxing), and had to stand ready to accept challenges every three months (Clipper, May 12, 1869).

From the mid 1850s to the end of the century sporting weeklies like the *New York Clipper, National Police Gazette, New York Sportsman* and *Spirit of the Times* all reported results of worker competitions and challenges. Besides a proliferation of fireman muster accounts, contests involving plowing, spading, mowing, reaping, pole climbing (for telegraph men), butchering and dressing, sheep shearing, bartending, packing, newspaper folding, typesetting as well as games for blacksmiths, draymen and tinkers were all consistently reported. Work records were standardized and maintained for many occupations and published, beginning in the late 1850s (a century before *Guinness* did so), in the *Clipper's* annual book of sports records.

Issues about Worker-Competitions

The common thread in all the above examples is that laborers participated in games or contests which replicated their work. Given their economic and cultural significance five issues are addressed: worker alienation as a possible cause; the implications for labor productivity; the rebuff by sports historians; the interplay of work and leisure; and the current status of such work-sports.[7]

A possible explanation for the emergence of worker-competitions may have been worker alienation. Marx argued that the in a modern capitalist society, the worker lives in an alienated and dehumanizing existence. Alien-

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[6] In printing, ems were a variable unit of measurement equal to the width of the capital letter M (thus the name). Walker Rumble, *The Swifts: Printers in the Age of Typesetting Races,* Charlottesville, VA, p. 40, noted that a speedy printer could set 2,000 ems of type per hour in 1870. Ross contends that, by the 1890s, new linotype machines, with lesser trained men, could type out up to 6000 ems per hour. See Steven J. Ross (1985). *Workers On the Edge: Work, Leisure and Politics in Industrializing Cincinnati 1788-1890,* New York, pp. 108-111

[7] The concept of worker competitions raises any number of economic and cultural issues. An expanded paper, for example, would allow a discussion of the issue of masculinity and could be cast in the historical context of the Muscular Christianity movement of the late 19th century.

ation was the historical product of the division of labor and capitalism. Marx (1927-35) explains that with estranged labor,

> the worker does not fulfill himself in his work, but denies himself: has a feeling of misery rather than well being, does not develop freely his mental and physical energies but is physically exhausted and mentally debased. The worker, therefore, feels himself at home only during leisure time, whereas at work he feels homeless. His work is not voluntary, but imposed, forced labor. (p. 85)

Weber extended Marx's argument contending that, in modern work, men could no longer engage in socially significant action unless they joined large scale organizations in which they were allocated specific tasks and to which they were admitted only upon condition that they sacrificed their personal desires and predilections to the impersonal goals and procedures that governed the whole. By doing so they would be cut off from a part of themselves, they would become alienated. It is possible that one push toward 19th century worker-competitions may have been the alienation described by Marx and Weber. But, given the voluntary nature of most of the contests this line of reasoning is unconvincing.

The experience of the 19th century racing typesetters, "the Swifts," offers insight into the attitude of many shopfloor athletes. Newspaper typesetters took their mundane task of setting endless lines of type and fashioned it into a timed contest. The initial contests, begun in the early 1870s, were both local and intramural. By 1885 they had become so popular that city, regional and national championships were held in dime museums and other public arenas. Rather than feel estranged, typesetters decided to put on a show (Rumble, 2003).

Second, there is the issue of whether or not worker productivity was enhanced by the use of work-sports. It is extremely difficult to gauge the economic impact of worker-competitions on 19th century labor productivity.[8] Work-sport finds itself in a situation similar to that of the Industrial Recreation (IR) movement which was legitimized during World War II. The concept is well understood both at the national (Blatt & Norkunas, 1996) and firm (Schleppi, 1979) levels. Hundreds of plants and factories provided recreational programs, facilities and equipment to war time workers emphasizing the importance of "teamwork" for the war effort. Castle (1950, 1950) made repeated claims that IR directly contributed in increased levels of productivity then and during the Korean War. Although the inferences appear reasonable, no measurable evidence supports this contention.

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[8]Labor productivity data from the Bureau of Labor Statistics (BLS) dates only to 1949. National Bureau of Economic Research (NBER) data is available for an earlier period for some industries. Neither provides productivity data by occupation.

It seems reasonable to treat worker-competitions in the same vein and as a subset of education and training. As Denison (1985) argues, for much of the 20th century, education and training accounted for about 12% of U.S. growth. What data we do have for 19th century industries, in which work-sports were frequent, is notable. Mining, for example, experienced a 29.2% increase in productivity between 1880 and 1900 (U.S. Bureau of Census, 1975). Another study claims the productivity improvements in mining approached 50% in the same period (Pursell, 1995). Productivity increases in the building of railroads was even more impressive, improving 29.4% in just ten years, 1889 to 1899. In agriculture the gains were equally significant. For example we find that in 1800 it took 373 man-hours to produce 100 bushels of wheat. By 1840 that figure was reduced to 233 man-hours, and by 1900 it took but 108 man hours. The data on corn was equally impressive. The significant savings in time could be devoted to other tasks (or more wheat) (U.S. Bureau of Census, 1975).

Productivity is generally measured as a ratio of output to input, the latter measured either by time, unit labor costs, or energy (Davis, 1977). The previous worker-competition samples can demonstrate a number of ways in which worker competitions played a small part in these impressive productivity gains. First, work-sports demonstrated to participants and non-participants alike, both the quality and quantity of work that could be accomplished. A counter-quality example may have been the building of the Transcontinental railroad which required higher than normal maintenance. But, Jacobs (1969) reminds us that, when Henry A. Wallace formalized national corn husks, he felt they "would make an excellent sport for farm families. In addition, he predicted (that) "on-looking farmers could learn how to become better huskers themselves" (p. 206).

Typesetting Swifts provide us with all the evidence necessary on the impact of worker competitions on productivity. Rumble (2003) for example, reminds us that, throughout 19th century history, production quotas were a recurrent issue that dominated the agenda of the International Typographical Union (ITU). By the mid 1880's typesetting Swifts had raised the productivity standard to such a high level that "On May 9, 1886, the Board of Delegates of New York's local (ITU) No. 6, officially condemned typeracing," fearing the management would raise production quotas (p. 148).

Second, worker competitions facilitated the refinement of equipment. Such labor saving devices explain the bulk of the productivity gains. For example, that champion drillers pioneered the shape of new hammers and the diameter of steel drills resulting in an enhancement of industry-wide drilling performances (Richie, 1951). Third, worker competitions verified the importance of planning and preparation as a means of increasing labor productivity. The Central Pacific's "Ten Mile Day" in 1869 demonstrated that substantial gains in laying rail could be produced when every worker movement was analyzed and supplies were within easy reach.

In summary, much of the productivity improvement in typesetting, farming, mining and laying rails is explained by standard factors: technological advances, more capital and economies of scale. A minor part is explained by the plethora of worker competitions. Etzioni (1995) maintains that productivity is enhanced when people derive psychic social and cultural rewards from work. Labor historians normally interested in the 19th century labor institutions, could do well to focus on laborer or occupational activity

A third issue deals with why sporting historians have given work-sports scant attention? In part the answer lies in the misunderstanding of the nature of work and play. Some may have felt that a contest involving both work and play was a paradox, the terms being literal opposites. What they may have failed to comprehend is that work was simply the origin of the contests. Guttmann (1978) reminds us that "we have a marvelous ability to transform any tedious or unpleasant task into a game" (p. 13). Work-sports began as utilitarian occupations. But in most instances, using a standard taxonomy, the transition from occupational play to organized game to competitive contest to work-sport occurred in a relatively short period of time.

As well, there was so much competition from the rise of other 19th century spectator-sports that work-sports simply got lost in the undertow. It's more fun to describe the importance of baseball as part of the cultural landscape than to do the same for rock drilling. The details for the historical sporting amnesia is still unexplained. Standard overviews of American sports history give scant to no attention to worker competitions (Betts, 1974; Dulles, 1965; Rader, 1990). Yet it is obvious that many of the 19th century worker-competitions eventually met all the formal characteristics of modern sport: secularism, equality, bureaucratization, specialization, rationalization, quantification, and an obsession with records (Guttmann, 1988). As way of example, as early as the 1850s, *secular* "engine-playing" imposed the same rules on all competing companies (*equality*). Regional *bureaucracies* administered musters and by 1858, even planned a "national championship" affair (Clipper, May 1, 1858). Competing firemen had *specialized* roles while musters had well defined rules (*rationalization*). Results were copiously recorded and reported (*quantification*) and records were kept by the national media (*obsession with records*). Within a few years the *Clipper,* in its annual record book, had established and maintained records for a dozen work-sports, from butchering to typesetting. Yet, given the application of this useful typology as a heuristic device, modern sporting historians have all but overlooked this movement.

There is yet another reason to consider the importance of work-sports. Other sports had their heroes: Mike 'King" Kelley (baseball), Donald Dinnie (Caledonian Games) and John L. Sullivan (boxing) are a few late 19th century examples. In approximately the same era occupational heroes, real and mythical, proliferated. Paul Bunyan (timbering), John Henry (rock drilling), Ole Mose—Moses Humprhey (fireman), Pecos Bill (rodeo), Johnny Appleseed—John Chapman (farming), Casey Jones (railroads), Gib Morgan (oil

fields) is but a partial list.[9] Two, Ole Mose and Johnny Appleseed, (1840s) actually predate any other American sporting hero. The fact that occupational sports had their heroes makes the omission even more incomprehensible.

A fourth issue deals with the concept of leisure. What was it that made laborers want to take jobs from the workplace and make contests of them, in a sense, to play at work? Are not work and play polarizations? Work, on one hand, is purposive, necessary labor, whether physical or mental. Play, on the other hand, is a cultural phenomena and is not seen as necessary. In his seminal "work" on play, *Homo Ludens*, Huizinga (1944) described play as having the following characteristics:

> (Play) is a free activity standing quite consciously outside "ordinary" life as being "not serious", but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained from it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. (p. 13)

To Huizinga (1944), because of the polarity of a utilitarian necessity and a cultural phenomenon, worker-competitions were not a possibility. In spite of Huizinga's theory 19th century worker competitions were genuine sports that can be explained by a combination of the political/economic struggle to reduce the work week, industrialization and the nature of leisure.

It should be noted that the 19th century political and economic struggles of the working class brought shorter workdays and more time for leisure. Rodgers (1978) has noted that the workday had been condensed by "squeezing periods of relaxation and amusement out of working hours, by trading long hours of casual work, for shorter, more concentrated workdays" (p. 108). Rosenzweig (1983) explains that "in 1830 eleven hours per day or more was the standard at more than half the establishments surveyed in a U.S. Census Bureau study; (and) by 1860 the figure had dropped to less than one-third" (p. 39). By the 1850s the ten hour day was common and in 1878, the Knights of Labor included the demand for an eight-hour day in its first constitution. Kando (1980) reports data on the average workweek decline, from 69.7 hours per week in 1850 to 37.2 hours per week by 1978. Nasaw

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[9]For an excellent summary of occupational heroes see a chapter entitled "Folklore of Economic Occupations," in Richard M. Dorson, *America in Legend: Folklore from the Colonial Period to the Present*, (New York, 1973), 127-222. Occupational heroes flourished for ethnic groups as well. For example, a whole set of African-American occupational heroes exist of the same period, including: Kerosene Charlie (a migrating laborer); Old Pete (a Herculean stevedore); and Roy Tyle (an ace mechanic). See volume one in the American Folkways series: Stetson Kennedy (1942). *Palmetto Country*, New York, pp. 121-145. Worker athletes can even claim a Presidential patron in Abe Lincoln, a six feet four inch and 216 pound rail-splitter. For a description of Lincoln's rail splitting accomplishments see Louis A. Warren (1959). *Lincoln's Youth Indiana Years: Seven to Twenty-one, 1816-1830*, New York, pp. 142-145, and William E. Barringer (1960). *Lincoln Day by Day: a Chronology, 1809-1865*. Vol. 1, Washington, DC, pp. 12-13.

(1993) concludes that, in this era "the fear of idle time as the devils workshop gave way to a reverence for play, promoted alike by middle-class reformers and working-class organizers" (p. 4).

Workers used their increased leisure time in a wide variety of ways. The reduction in work time provided the opportunity for worker competitions. For example, Bevans (1913) confirmed that a small but significant amount of spare time of tradesmen was used for athletic games. Hirsch (1978) examined the free time of factory workers in the antebellum period and found that they tended to join leisure groups, most notably volunteer fire companies.

Nineteenth century industrialization also helps explain the emergence of worker-competitions. Factory and non-factory workers alike became increasingly time conscious as mechanization dictated a day organized by the clock. Time not only separated work and leisure but became a way to judge the completion of tasks. Cross (1990) and Brody (1989) tells us that the more routine the job and the less vital craftsmanship became, the more essential time was. Jobs and most worker-competitions featured the element of time. For example: hand drilling had to be completed within 15 minutes; husking within 80 minutes; or laying rails within a 12 hour day.

Many 19th century jobs, whether out-of-doors or on shop floors, whether skilled or not, were physically demanding, dull and routine. In this period of industrialization efficiency-minded managers split up jobs into more productive but less complex tasks. Factory work was relentless and monotonous. Wiggins (1982) has observed "there were often built within these jobs many of those things like camaraderie, competition, and entertainment that made their tasks pleasurable" (p. 35). Garson (1994) demonstrates that everyday workers in menial jobs find clever and creative ways to avoid becoming dehumanized. One avenue was to make games out of work. Again, the example of the typesetting "Swifts" is insightful. Instead of rebelling against a piece rate system, long hours, and technological improvements that might hasten an occupational demise, the American typesetters decided to celebrate their speed by displaying it in contests. Rumble (2003) tells us that English and French compositors, similarly challenged, either boycotted or picketed. In the United States the typesetters raced.

A third explanation for the emergence of work-sports is psychological. Most modern scholars recognize a link between work and leisure and most assume that work has an effect on leisure. Gelber (1983) argues that leisure *either* compensates people (compensatory hypothesis) for some shortcoming in their work experience, *or* models (congruent/spillover hypothesis) their work situation. Both arguments assume the job will determine leisure behavior, the question being whether the determinant is negative (compensatory) or positive (congruent/spillover).

The lion's share of modern social science data supports the congruent or spillover theory (Gelber, 1983, 1999). Gelber (1999) claims that "it is fairly obvious that people who have developed manual, mental, or social dexterity on the job will often seek pastimes that showcase theses same abilities" (p. 18). This theory is useful in explaining why someone who hand drilled rocks

for 12 hours daily and all week long would give up his weekend to engage in a rock drilling contest. The compensatory hypothesis cannot explain this. The congruence theory does since it is based on the assumption that people do not reject their experience in the world of work. In other words, their choice of leisure activity reflects the environment of the workplace. Csikszentmihalyi (1990) reminds us "The more a job inherently resembles a game—with variety, appropriate and flexible challenges, clear goals and immediate feedback—the more enjoyable it will be regardless of the worker's level of development"(p. 22). Ownby (1990) asserted that many farm games began as work sharings, then turned competitive as "work was turned into play."(p. 90). Workers, for example, take the same delight in completing, say, a husking chore in a certain amount of time or laying bricks smartly as they would in a husking or brick laying contest. Gorz (1989) emphasized that work can be a fulfilling activity, a means of self-creation. In summary, within the framework of the congruence theory, the nature of work, in an emerging industrial era and additional leisure time for labor, set the table for work-sports. Socially independent and vigorously competitive people did the rest.

Even though a smaller percentage of the U.S. work force today is engaged in physically demanding work than 150 years ago, worker competitions proliferate. Work itself has become more professionalized and less playful, less like leisure (Ritzer & Walczak, 1986). Yet, in many cases today, antiquated skills, which bear little resemblance to modern jobs, are still required in competitions (eg. lumberjacking, tub pumping and rodeo). Nearly one hundred occupations now offer local, regional or a national championship (see Table 2).

Many 19th century work-sports have survived and in their original form. And new work-sports have materialized. Today U.S. work-sports are offered on three different planes. At the top several work-sports have developed to the point of being entertainment for the public. These spectator work-sports are highly popular at the national level, have long standing television contracts, and a cadre of professionals make their living as worker-athletes. Rodeo, timber sports and some forms of firefighting fall into this category. Today rodeo is the most successful of all former work-sports. It is contested in over 40 states and at every imaginable level: Almost 100 US colleges sponsor a rodeo team and offer scholarships. Women have their own professional cowgirl events. Even prisons offer rodeo as a sport. Hundreds of low key rodeos are held with country fairs and livestock shows. At the highest level there are more than 10,000 professional cowboys who annually compete in over 600 major league rodeos for more than 30 million dollars of prize money in front of 22 million spectators. Thirty hours of cable network TV were televised in 2001, with viewer-ship estimated at 40 million. (Professional Rodeo Cowboy Association, personal communication, October 16, 2001). The numbers are only slightly less impressive for lumberjacking.

On another level, many work-athletes parade their skills at national events, regional and local festivals, state and county fairs, trade shows and conventions. Corn husking, oyster shucking, grocery bagging, grave digging

TABLE 2
Occupational Sports, 2002

National Championships

Bartenders (1)
Bike Couriers (2)
Broom Sweeping (3)
Cashiers (4)
Cemetery Workers (5)
Chambermaids (6)
Corn Husking (7)
Farriers (8)
Fast Food Crews (9)
Fence Painting (10)
Fireman's Combat Challenge (11)
Gift Wrapping (12)
Life-Guarding (13)
Lumberjacking (14)
- Ax Throwing
- Single Bucking
- Double Bucking
- Standing Bloc Chop
- Speed stock saw
- Springboard Chop
- Log Rolling (Birling)
- Tree Climbing
- Tree Toping
- Power Sawing
- All-Around

Masonry (15)
Mine Safety & Rescue (16)
Moving & Storage (17)
Naval Pentathlon (18)
Oyster Shucking (19)
Plowing (20)
Police Games (21)
Rodeo (22)
- Riding
- Bareback
- Saddle Bronc
- Bull
- Roping
- Calf
- Steer
- Goat Tying
- Team
- Steer Wrestling
- Barrel Wrestling
- All-Around

Sheep Shearing (23)

Local/Regional Contests Only

Barb Wire Splicing (30)
Blacksmithing (31)
Canning (32)
Crab Picking (33)
Crab Trap Pulling (34)
Fireman's Musters (35)
Gold Panning (mucking) (36)
Grape Stomping (37)
Hand Drilling (38)
Hay Loading (39)
Iron Column Climbing (40)
Lawn Mower racing (41)
Milking (42)
Milling (43)
Nail Driving (44)
Picking/Harvesting
- Berry (45)
- Cotton (46)
- Peanut (47)
- Potato (48)

Pruning (49)
Fruit Trees
Grapevines
Rail splitting (50)
Raking, Cranberry (51)
Search and Rescue (52)
Taxidermy (53)
Threshing (54)
Tomahawk Throwing (55)
Town Crier (56)
Whitewashing (57)

Skills USA (58)

Air Cooled Gasoline Engine Technology
Automotive Service
Aviation Maintenance
Building Maintenance
Cabinetmaking
Carpentry
Collision Repair
Diesel Equipment Repair
HVACR (Heating, Ventilation, Air Conditioning, Refrigeration
Industrial Maintenance
Industrial Motor Control
Major Appliance Technology
Marine Service
Masonry
Motorcycle Service
Precision maintenance
Residential Plumbing
Residential Wiring
Sheet metal
Welding
Teams:
Team Build

FFA and 4-H (59)

Ag Mechanics
Forestry Contests
Logging
Motors
Tractor Driving
Welding
Wiring
Woodworking

Apprentice (60)

Machining
Masonry
Tooling

TABLE 2
(Continued)

National Championships	Local/Regional Contests Only	Skills USA (58)
Sheep-to-Shawl		
Shoveling, World Contest (24)		
Telephone Linemen (25)		
Truck Backing/Parking (26)		
Typing (27)		
Waiters, Waitresses (28)		
Welding, Cutting (29)		

Note: Information on occupational competitions provided by the following organizations: (1) Fastest Bartenders Association (FBA); (2) Cycle Messenger World Champs (CMWC); (3) National Broom Sweeping Contest, Ancola, IL; (4) Food 4 Less, Inc.; (5) National Cemetery Games, Denver, CO, *Only a Game,* National Public Radio; (6) Super 8 Motels National Bed-making Contest, Bloomington, MN; (7) National Cornhusking Championships, Iowa State Fair, Des Moines, IA; (8) American Farriers Association (AFA); (9) McDonald's, Inc.; (10) Tom Sawyer Fence painting Contest, Hannibal, MO; (11) On Target Challenge, Inc., Burtonsville, MD; (12) Wrap-Off, Minnesota Mining & Manufacturing Co., St. Paul, MN; (13) U.S. Life Guard Association (USLA) National Championships, San Diego, CA; (14) U.S. Lumberjack Association, U.S. Axemen Association, and American Birling Association; (15) Mason Contractors Association of America (MCAA); (16) West Virginia Office of Miners , Health, Safety and Training, and Northern Mine Rescue Contest, Bruceton, CO; (17) American Moving & Storage Association (AMSA); (18) Consell International du Sports Militarie (CISM), Belgium; (19) National Oyster Shucking Championships, St. Mary's County, Leonardtown, MD; (20) International Plowing Match and Farm Machinery Show, Guelph, Ontario; (21) World Police and Fire Games; (22) Pro Rodeo Cowboy Association (PRCA), Work Ranch Cowboy Association (WRCA), and National Intercollegiate Rodeo Association (NIRA); (23) National Sheep Shearing Contest, Denver Western National Livestock Show, Denver, CO; (24) Shovel Museum, Stonehill College, N. Easton, MA; (25) The Lineman's Rodeo, Kansas City, MO; (26) Mack Truck, Inc, Hagerstown, MD; (27) Underwood, Inc. (28) e.g., Bastille Day Celebration, Washington, DC; (29) National Welding and Cutting Manufacturers, (30) Kansas Barbed Wire Museum, LaCrosse, KS; (31) Artist Blacksmith Association of North America (ABANA) magazines—*The Anvil Ring* and *Hammer Blow;* (32) National Pickle Festival, Berrien Springs, MI; (33) & (34) National Hard Crab Derby and Fair, Crisfield, MD; (35) National Fire Academy (NFA), Emmitsburg, MD; (36) U.S. National Gold Panning Championships, Columa, CA; (37) e.g. Brotherhood Winery, Washingtonville, NY (38) International Intercollegiate Mining Competition, University of Nevada, Reno, NV; (39) e.g. Antelope Valley Fair and Alfalfa Festival, Lancaster, CA; (40) Iron Workers Union; (41) National Lawn Mower Races, Indianapolis, IN; (42) All American Dairy Show, Harrisburg, PA; (43) Montana State University, Bozeman, MT; (44) Old Miners Association, Bear Lake, CA; (45) The Blackberry Bulletin, NJ Agricultural Experiment Station, Mays Landing, NJ; (46) Cotton Picking Contest, Ridgeville, AL; (47) National Peanut Festival, AL; (48) Idaho State Fair; (49) California State University-Fresno FFA Field Day, Fresno, CA; (50) Abraham Lincoln National Rail Splitting Contest, Logan County, IL; (51) State Historical Society of Wisconsin, Contest-Berlin, WI; (52) Annual National Search and Rescue Competition (for Navy and Coast Guard Air Crewman), San Diego, CA; (53) Annual Eastern Sports Boat, Camping, Travel & Outdoor Show, Harrisburg, PA; (54) Annual Threshing Contest, McLean, VA; (55) e.g., Burnt Hole Mountain man Rendezvous, W. Yellowstone, MT; (56) The American Guild of Town Criers; (57) Mark Twain Days, Hannibal, MO; (58) SkillsUSA-VICA, Leesburg, VA; (59) Future Farmers of America (FFA) and National 4-H Clubs; (60) National Tooling and Machining Association (NTMA).

(yes, there is a "Cemetery Olympics"), plowing, gift wrapping, chambermaiding, life-guarding, sheep shearing, and bike courier delivery are a few examples of modern work-sports which are played at every level but which also conduct a national championship. Many could be termed "Chamber of Commerce" events, sponsored to promote tourism, civic pride or fundraising. Today many "construction" trades conduct national championships: everything from bricklaying to shoveling to carpentry. For example, the popular "Fastest Trowel in the West" masonry contest annually matches the nation's top bricklayers (Young, May, 2001). Most of these events are sponsored by trade associations and a conservative estimate finds several hundred thousand participants annually.

Attesting to their influence on productivity, some work-sports have become part of the educational process. For example, each June more than 4000 students, mostly from vocational-technical institutions, descend on downtown Kansas City, Missouri, for the Skills/USA nationals, one of the nation's largest and longest sporting events. The students, each a "state occupation champion," demonstrate speed, strength, endurance, planning and mental toughness by competing in time honored contests against one another. Trade and union representatives assist in the organization and judging. What emerges is a national champion in over seventy occupations, everything from carpentry to masonry to welding to computer maintenance technology to commercial baking.

Only the nation's best student/occupational athletes make it to Kansas City. Qualifying rounds are held at the local, regional and state levels. Skills/USA, the national coordinating arm, estimates that annually a quarter of a million students (in more than 13,000 chapters) compete in occupational contests at some level (SkillsUSA, 2001). The contests are in 44 skill trade events, six health occupation events with another 20 in occupationally related or leadership events. And it doesn't even end there. Annually a number of vocational national champions go on to compete at the World Skills Competition, a sort of occupational Olympics for high school students.

So today, work-sports thrive. Most have websites. More than one half a million workers compete in worker-competitions annually (see Table 3).

Conclusion

No written history of 19th century American labor is complete without an account of the worker-competition movement. They provided laborers with a challenge and diversion from routine work, an efficiency check, team building, and a boost to morale. They may have been beneficial to worker productivity although empirical data supporting these benefits are lacking.

Worker-competitions were initially local or regional events which flourished on the farm or frontier, typically in an all male environment like cattle drives and mining or lumber camps. This overlooked labor practice offers a new understanding of 19th century work. At the time work-sports were accepted as genuine sporting events.

TABLE 3
*U.S. Work-Sports Athletes in 2000**

	N
Top Spectator Level	
Rodeo	
Professional	10,000
Collegiate and other**	2,500
Lumberjacks***	4,000
Firefighters	5,000
Mid-Level	
@50 occupational sports	300,000
Educational Level	
eg. SkillsUSA	245,000
Total:	566,500

Note. Adapted from information provided by: Professional Rodeo Cowboy Association, U.S. Lumberjack Association, National Fire Academy and SkillsUSA-VICA..
*-defined as someone who has competed in at least one local, regional or national worker-competition, in 2000., **-includes numbers of the 96 colleges/universities who sponsor the sport, cowgirls in Women's Association, and prison participants, *** also include axemen and birlers.

In pre Civil War Pittsburgh, for example, silver cups, medals and money were bestowed on champions of annual mowing, reaping and plowing contests (Brynn, 1968). The new sporting journals like *The American Farmer, The Turf Register, The Spirit of the Times* and the *Clipper* all gave attention to worker-competitions in their publications. Additional investigations need to go beyond descriptive accounts to provide an understanding of the bond between work and play.

Today more than one half million workers compete annually in worker competitions. Some of the job related sports have attained entertainment status while technical educational institutions, recognizing the impact on productivity, have made the contests a standard part of the curriculum.

Although many (Holliman, 1931) sporting historians claim that most American sports came from Europe, this is not the case for work-sports which matured in a different environment. In America work-sports resembled everything the economic system promoted: efficiency, goals, and success. It captured the spirit of the American experience and contributed to the grand scheme in a more productive or utilitarian sense (Wiggins, 1982). This may explain why Americans, with exception of Southern oligarchy, did not engage overwhelmingly in the deliberately stylized games of the British. Rather they invented their own. To Americans there was something natural about making a game of work. That 19th century work-sports were genuine is self-evident. Without them life on the farm, in the new factory or office, in the mine or in the lumber camp would have passed through a never-ending pattern of habit and work. No more reason for them need be given than that life was more enjoyable for their existence. This paper provides only of

glimpse of the work-sport phenomenon and the rationale for the interplay of work, leisure and economics. Most of the labor on 19th century worker-competitions lies in the 21st.

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